

R·S·G·B VOLUME 20 • NO. 12 • COPYRIGHT • PRICE 1/6

JUNE, 1945

BULLETIN

JOURNAL OF THE RADIO SOCIETY OF GREAT BRITAIN



- AMATEUR LICENCES—IMPORTANT ANNOUNCEMENT
- A SINGLE-VALVE FREQUENCY DIVIDER
- DETACHED CONTACT CIRCUIT DIAGRAMS
- THE KREIGES RETURN THANKS

NEW (FOURTH) EDITION SHORT-WAVE RADIO

By J. H. REYNER

B.Sc. (Hons.), A.C.G.I., D.I.C.,
A.M.I.E.E., M.Inst.E.E.

This book gives an account of the tremendous progress which has been made in the field of short-wave radio telegraphy during the last few years, and shows how many of the problems formerly regarded as insuperable have been overcome. It gives a comprehensive survey of the available data concerning these waves, and of the practical methods by which they have been harnessed for radio and television transmissions.

In this fourth edition the author has included some discussion of the technique of velocity modulated oscillators and the important subject of wave guides.

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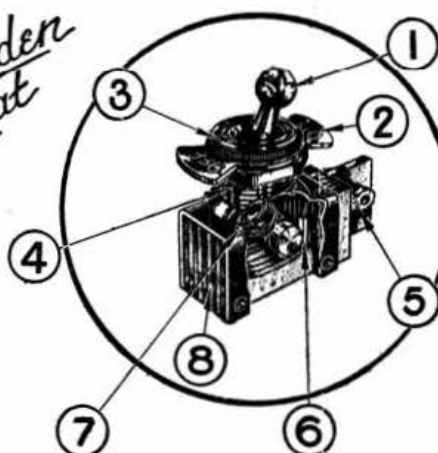
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No. 12

IMPORTANT ANNOUNCEMENT

Preparations being made for the Re-Issue of Amateur Licences

Applications can Now be Submitted by Pre-war Full Licence Holders

AS the result of discussions which have taken place between representatives of the Society and the General Post Office, arrangements have been made by the G.P.O. to accept applications for the re-issue of radiating licences to those who held them at the outbreak of the war. The purpose of this arrangement is to assist the G.P.O. by giving them as much time as possible for the work involved. **It must not, however, be inferred that licences are to be re-issued immediately.**

HOW TO APPLY

Those who wish to make application should address a letter in the following terms to:—

**Radio Branch, W2/6,
Engineer in Chief's Office,
(Alder House), G.P.O.,
London, E.C.1.**

Dear Sir,—I shall be glad if you will regard this as my formal application for the issue of a licence to permit me to resume my experiments in wireless using a radiating aerial.

The particulars of my former licence, determined at the outbreak of war, were:—

- (a) *Name of Licence*.....
(b) *Address of Licenced Station*.....
(c) *Call Sign*.....

The address to which all future correspondence should be sent is.....

Yours faithfully

No other information is required at the present time.

HOLDERS OF PRE-WAR ARTIFICIAL AERIAL LICENCES AND NEW APPLICANTS

Pre-war holders of Artificial Aerial Licences and those who have not previously held a transmitting licence, are particularly requested not to apply at the moment, as such applications will have to be dealt with in a different manner. An announcement covering such cases will be published later.

IMPOUNDED APPARATUS

Members who have changed their address since their transmitting apparatus was impounded at the outbreak of war, are requested to forward; **as soon as possible**, the following particulars to

**Radio Branch, W2,
Engineer in Chief's Office,
(Alder House), G.P.O.,
London, E.C.1.**

- (a) *The address from which the apparatus was impounded.*
(b) *The name and address of the person to whom the apparatus is to be returned.*

It is unnecessary to submit a detailed list of the apparatus which was impounded.

Impounded apparatus cannot be released at present, but an announcement will be made as soon as permission is given. The apparatus will then be returned without application from the owner.

When the apparatus is returned it should be checked against the original receipt and any query referred without delay to the G.P.O.

A charge may be made if the new address is outside the delivery area of the G.P.O. Section responsible for the original collection.

A SINGLE-VALVE FREQUENCY DIVIDER

By PATRICK F. CUNDY*, A.M.I.E.E. (G2MQ).

Introduction

A METHOD has been devised of using certain types of frequency-changer valves as single-valve frequency dividers, particularly suitable for obtaining 10 kc/s. harmonics from a 100 kc/s. crystal controlled sub-standard oscillator. The single-valve divider uses fewer components, occupies less space and is easier to adjust than the more usual multivibrator. An outline of the method was described by the author to a meeting of District 15 members in August, 1943, and a fuller account of the mode of operation has been published elsewhere⁽¹⁾. The present article contains details and suggestions for the application of this principle to frequency sub-standards for amateur use.

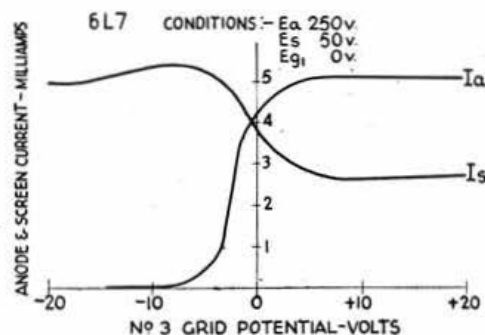


Fig. 1.

Anode and screen current curves with G_3 potential as axis.

Electrode Nomenclature

When using triode hexode valves, the triode anode is returned to cathode and is not considered. The electrode referred to as grid No. 1 is the signal grid in the case of valve types ECH35, X65, 6L7 (top cap) and the oscillator grid of type 6K8 (pin No. 5). The electrode denoted by grid No. 3 is the oscillator grid in types ECH35, X65 and 6L7 and the signal grid of type 6K8. The screens in each case are the double electrodes connected to pin No. 4, and the anodes are those connected to pin No. 3.

Relaxation Oscillation

The single-valve divider functions on the same principle as the multivibrator in as much as they are both synchronised relaxation oscillators. The means by which the relaxation oscillation is secured in the single-valve circuit can be visualised by reference to the curves Figs. 1 and 2. Fig. 1 shows the variation in anode and screen current when they are fed from a 250 volts supply through a 3,000 ohms and a 50,000 ohms resistor respectively. It will be noted that over the centre range a change in G_3 potential occasions a greater change in screen potential in the same sense, so that if the G_3 is coupled to the screen by a simple resistance-capacity coupling the operating point cannot dwell on the centre region, it must either go well positive or well negative. A typical circuit is shown in Fig. 3 and relaxation oscillations will be generated in the following manner: Assume a starting point with the No. 3 grid well negative, the potential

will slowly increase towards zero as the coupling condenser discharges through the grid resistor R_2 , as soon as the potential has increased to a point where the screen potential also starts to increase, the G_3 will swing abruptly into the positive region, for the reason mentioned above. The discharge process starts again, more quickly now, because when the G_3 is positive

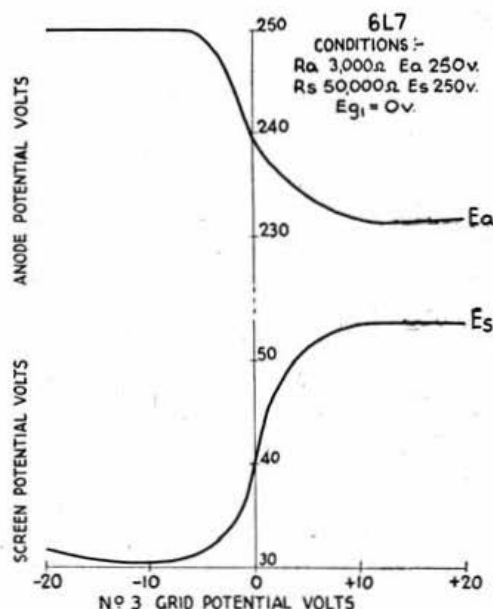


Fig. 2.

Anode and screen potential curves with G_3 potential as axis.

there will be an emission current flowing to it as well as the grid resistor to do the discharging. When the region of decreasing screen potential is reached an abrupt swing into the negative region will occur and the cycle will be repeated indefinitely.

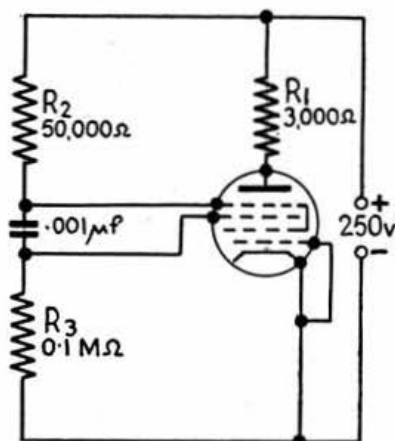


Fig. 3.

Relaxation oscillator circuit.

* 10, Moor St., Shaw, Oldham, Lancs.

Frequency Determination

The frequency of the unsynchronised oscillation will clearly depend upon: (1) The value of the coupling condenser. (2) The value of the grid resistor. (3) The screen voltage swing between which the oscillations occur. The latter factor controls the frequency because it determines the charge given to the grid condenser and hence controls the time taken for the charge to be reduced to the swing-over value, the magnitude of the screen voltage swing varies with valve type.

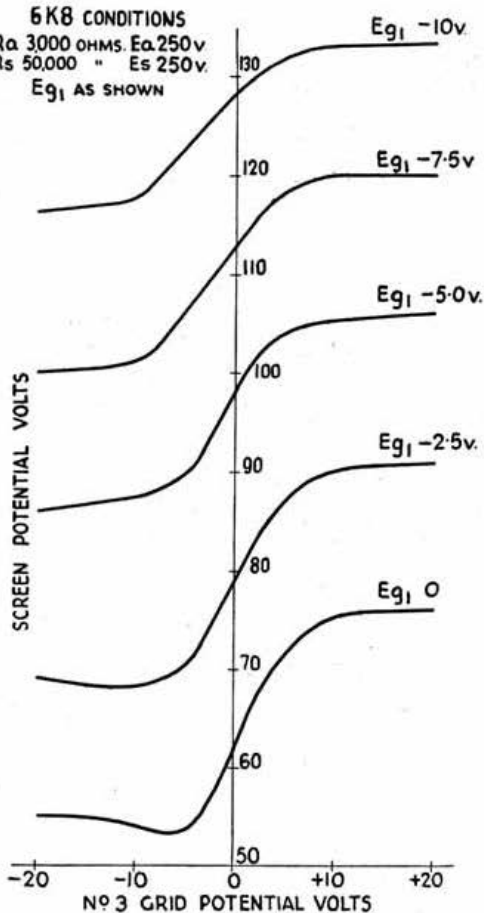


Fig. 4.

Effect of No. 1 grid potential on screen potential curve.

With E_a 250 v. through 3,000 Ω , E_s 250 v. through 50,000 Ω and $E_{g1} = 0$.

$$F = \frac{K}{R.C.}$$

F = Frequency of oscillation in kilocycles per second.
 R = Grid resistor in megohms. C = Grid capacity in picafarads. K = Constant for valve type as shown in the Table.

Valve Type	Value of "K"
ECH35	240
X65	500
6K8	420
6L7	840

Frequency Control

Adjustment of frequency may be achieved by variation of either R , C or K . R can be made of a fixed resistance in series with a variable resistance for fine adjustment. C can similarly be adjusted by means

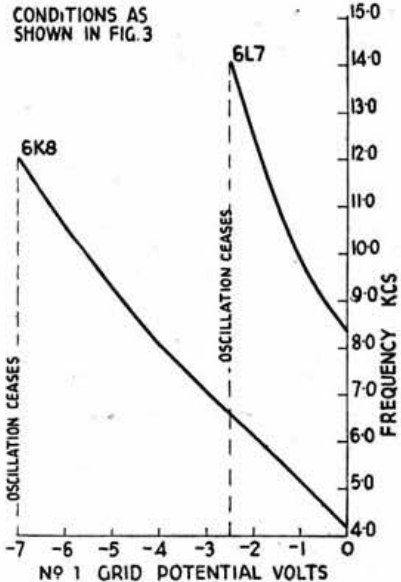


Fig. 5.

Variation of frequency with No. 1 grid potential.

of a small compression trimmer in parallel with the coupling condenser. Variation in K can be achieved by variation of the potential of grid No. 1. Fig. 4 gives a series of curves taken on a 6K8 valve, illustrating how the screen voltage swing is reduced (K increased) as the No. 1 grid is made negative. Fig. 5 gives actual frequency-bias curves of a 6L7 and a 6K8 in the circuit of Fig. 3. Fig. 6 shows a suggested circuit for a 6L7 to give a range of 9 to 11 kc/s. There is no outstanding merit in any of these methods, the one adopted may be decided purely as a matter of convenience.

Application

The most satisfactory synchronising method is to inject a small signal on the No. 3 grid. Here again a

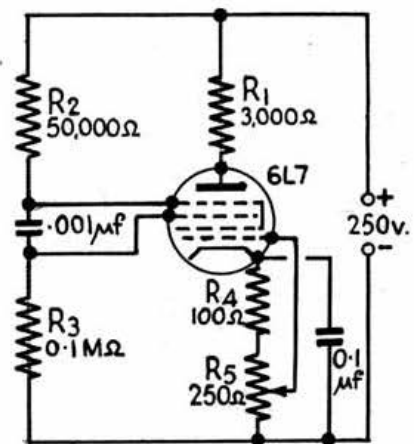


Fig. 6.

Circuit values for frequency range of 9-11 kc/s.

choice of variable resistance or variable condenser is available for controlling the magnitude of the injected signal, as typified by Fig. 7 (a) and (b). The

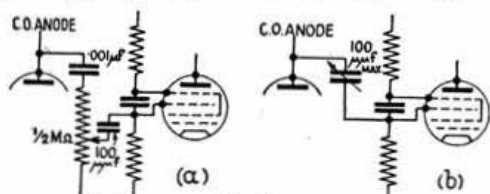


Fig. 7.

Two methods of adjusting magnitude of synchronising signal: (a) variable resistance; (b) variable capacity.

variable condenser is slightly superior as it imposes a smaller load on the crystal oscillator. The adjustment procedure for the frequency and locking control is exactly the same as for a normal multivibrator type

of divider (?), but there is only one control for frequency instead of two, which usually have to be adjusted simultaneously in the multivibrator case. Sufficient voltage is developed across a 3,000 ohms anode to fully drive a normal R.F. pentode as a buffer and harmonic amplifier. The crystal oscillator may well be a conventional dual 100/1,000 kc/s. oscillator (?), in which case a three-pole three-way switch can be conveniently arranged to select the desired fundamental. The complete circuit diagram of a successful three-valve 1,000/100/10 kc/s. frequency sub-standard built on this principle is given in Fig. 8.

References

1. P. F. Cundy: "A Single-valve Frequency-divider." *Wireless World*, November, 1943.
2. The Amateur Radio Handbook, 2nd edition, page 219.
3. The Amateur Radio Handbook, 2nd edition, page 218.

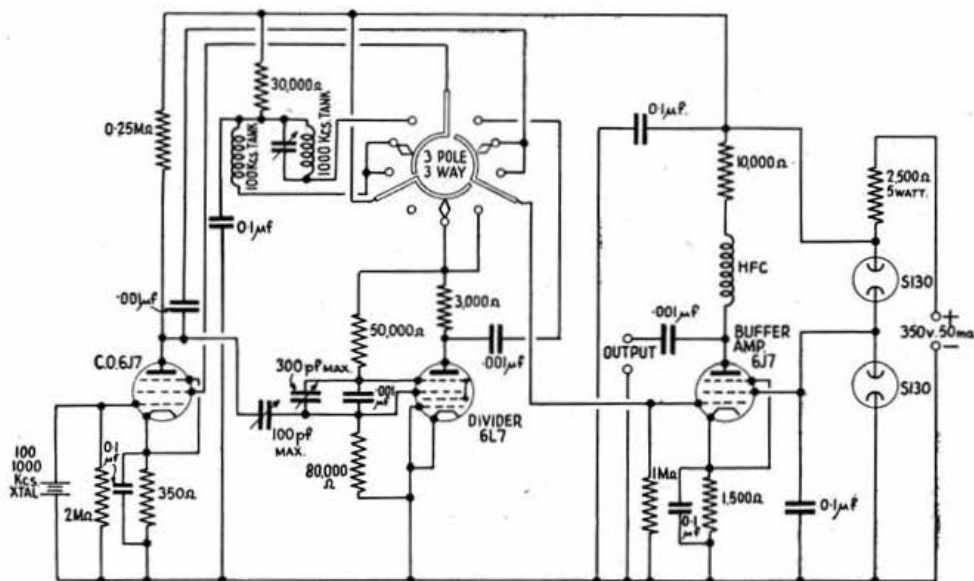


Fig. 8.

Circuit diagram of complete 3-valve 1,000 kc/s., 100 kc/s. and 10 kc/s. frequency sub-standard.

Prisoner of War News

The past month has brought further good news from members who have been held captive by the Germans. In addition it is with feelings of considerable relief that we record the release from the hands of the Japanese of Major Jack Drudge Coates, VU2FO, and Ft./Lt. J. Oswald Dykes, 2AIJ. The former was in action on the Arakan Front of Burma during February, 1944, and for many months grave fears for his safety were entertained. The news that he is alive will be read with relief by his many friends. 2AIJ was captured in May, 1943.

Since the publication of the May BULLETIN the following members have notified Headquarters of their return to the United Kingdom from Germany:—

2nd/Lt. D. G. Blair ..	..	G8DU
Tel. P. D. Briscoe ..	..	G8KU
Cpl. D. W. Carr ..	..	G8UC
P.O. N./A. H. G. Cunningham	..	ex G5CI
Tpr. N. Druce ..	..	BRS2600
2nd Lt. D. L. Flower ..	..	G8TO
2nd Lt. E. M. Frost ..	..	BRS2692
Sig. R. M. Garrett ..	..	G3BP
2nd Lt. S. Heath ..	..	—
Sgt. G. Kennaby ..	..	BRS5248
Lt. A. W. Lister ..	..	G5LG
Sig. M. R. MacArthur ..	..	G4LB
Sgt. A. Newson ..	..	BRS5290
2nd Lt. M. L. Quartermaine ..	..	G3FZ
Lt. E. W. Rodwell ..	..	G8AG
Sgt. W. Spink ..	..	G5SP
Gnr. J. Truscott ..	..	BRS3013

L./Cpl. G. Wakefield G5WG
Senior Radio Off. A. C. Webb .. G6WQ
L.A.C. B. A. Wilkes BRS4011

The Hon. Administrator of the R.S.G.B. P.O.W. Fund (Mr. C. H. L. Edwards, G8TL) and the General Secretary, have received numerous letters of appreciation (extracts of which appear in our correspondence columns), from returned prisoners of war.

OUR FRONT COVER

NOTHING much of real experimental worth in radio can be accomplished without accurate measurement. The Model 7 Universal AvoMeter is a 50-range B.S. first-grade combination measuring instrument giving direct readings of A.C. and D.C. Voltage, A.C. and D.C. current, Resistance and Capacity. Audio-frequency power output and Power Level readings are also provided for. It is but one of the comprehensive range of "AVO" high-grade electrical measuring instruments—a range which includes something to meet the needs of every amateur, service engineer and serious experimenter. At the present time, however, the manufacturers are only able to accept orders which bear a Government Contract Number and Priority Rating. Fuller particulars obtainable from The Automatic Coil Winder & Electrical Equipment Co., Ltd., Winder House, Douglas Street, S.W.1.

DETACHED CONTACT CIRCUIT DRAWINGS AND HOW TO READ THEM

By ARTHUR O. MILNE (G2MI)

THE following notes are intended to help those interested in the employment of relays and multi-contact hand-operated switches, but who are discouraged from using them because of certain unfamiliar terms and graphical symbols involved. At the same time this is in the nature of a statement of policy on future articles dealing with this type of equipment and the standard symbols which will be employed.

Relays

A relay, in essentials, is an electrically operated switch. It may be electro-magnetic or electro-thermal; the majority are magnetic.

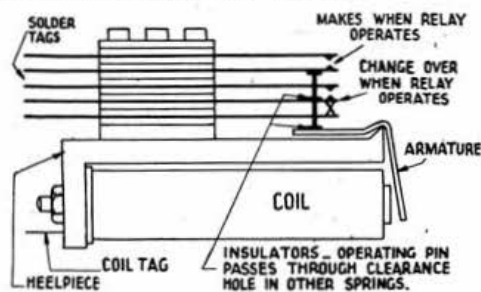


Fig. 1.
Typical telephone type relay

Basically, a relay consists of a coil of wire wound on a soft iron core, so arranged that when a current passes through the coil, the core becomes a magnet and attracts a piece of soft iron called an armature. This armature is constructed to effect the mechanical movement of one or more sets of spring-tensioned contacts, usually called "springs"; a number of contacts in one assembly being called a "spring-set." There are four types of contact combination for both relays and hand operated switches (dealt with later):

1. *Make*.—Single-pole single-throw. Contacts close when operated.
2. *Break*.—Single-pole single-throw. Contacts open when operated.
3. *Change-over*.—Single-pole double-throw. Moving spring breaks from one before making on another when operated.

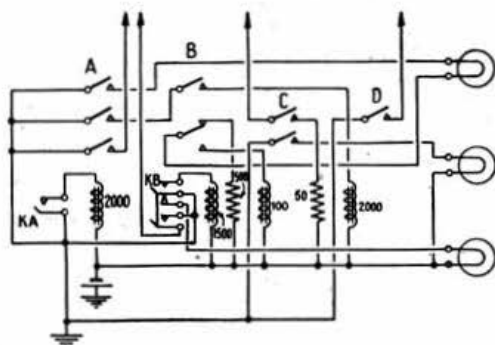


Fig. 2.
"Attached" contact circuit diagram.

4. *Make-break*.—Single-pole double-throw. Makes on one before breaking from another, when operated.

The name of the contact, therefore, is a short way of indicating what it does when the armature moves. "Make" is short for "make contact when operated" and so on. A typical relay spring set-up is shown in Fig. 1.

Relays and their associated contact springs are always shown on a diagram in their normal position, that is, with none of the relays energised. It is a simple matter, therefore, to follow the circuit operation in a logical manner when this fact is realised.

Detached Contact Diagrams

In the early days of telephone development, when the number of relays employed was very small, circuit diagrams usually depicted the relays and their

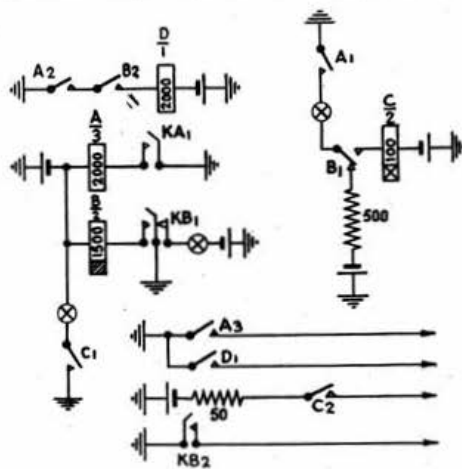


Fig. 3.
Circuit of Fig. 2 "detached."

associated contact springs in the manner of Fig. 2, but with the coming of automatic switching, with its complicated circuits and multitude of relays, some more simple method was essential if diagrams were not to be quite incomprehensible. Hence the detached contact system. In this type of drawing the relay contacts are disassociated from the parent relay and are shown in that part of the circuit which they serve, not necessarily near the relay coil itself. Fig. 3 shows the circuit of Fig. 2 drawn in the modern manner, the simplicity of the latter is self evident. The convention of a cross within a circle indicates a lamp.

In telephone circuits, the exchange battery positive is earthed, the negative side is, therefore, referred to as "Battery," the positive as "Earth," the conventions being as shown in Fig. 3.

Each relay is identified by a letter, the number of associated spring sets being indicated as a fractional number. $\frac{A}{3}$ (i.e., relay A) when energised will perform three separate switching operations. Reference to the relative circuit drawing will show where these occur and their function, make, break, etc. Each spring set is numbered, No. 1 being that

nearest the frame of the relay. A system of numbering individual springs is now in use but it is unlikely that members will find it necessary to trouble themselves with this refinement.

The resistance of each coil of a relay is indicated within the relay symbol; see Fig. 3. In the case of double coil relays the graphical symbol is divided and the resistance of each section shown separately.

Relays may be made "slow-to-operate" and "slow-to-release" by means of either a copper "slug" fitted to the coil or by the introduction of a short-circuited winding. "Slow-to-release" is attained by fitting the "slug" at the end of the coil remote from the armature. "Slow-to-operate and release" by fitting the "slug" at the armature end. The symbols for these two types are shown in Fig. 3. Relay B being slow to release and Relay C slow to operate. Delays up to about $4/5$ th second can be obtained in this way and depend upon the eddy-current effect set up in the mass of copper.

Hand operated Switches

Many types of multi-contact hand-operated switches are now available, the most familiar being the Dewar type switch known to telephone engineers as a "key," for reasons so ancient and obscure that they need not be pursued here.

These switches have many uses in the control of relays and other apparatus and are mentioned here because it is usual to show their contacts detached, just like relays. Fig. 4 shows some typical examples and also how they may appear on a detached contact diagram. The "keys" are designated KA, KB, KC, etc., and each spring-set thereon is separately numbered KA1, KA2, KB1, KB2, etc., just as in the case of relay springs. Where a "key" moves in two

directions, the spring sets on one side are numbered 1-2-3. On the other 21-22-23, etc.

Any member interested in a more detailed study of the symbols and conventions mentioned above should peruse a copy of British Standard, No. 504, 1937, "Graphical Symbols for Telephony, Telegraphy and Radio Communication."

Future articles published in this Journal will conform with these standards and relay circuits will be drawn in detached contact style.

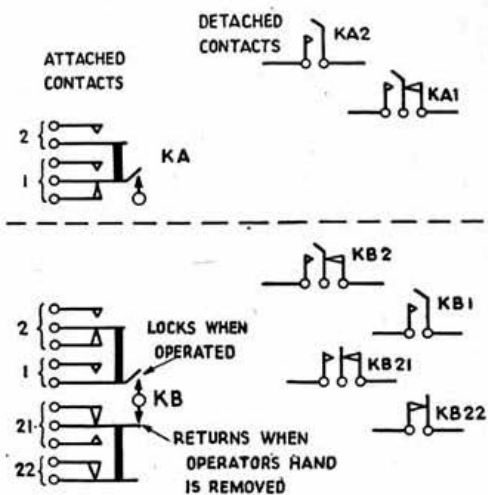


Fig. 4.
Dewar type switch contacts shown in old style and detached.

High Praise

Speaking at the monthly luncheon meeting of the Radio Industries Club, on May 29, Professor Sir Edward V. Appleton, K.C.B., D.Sc., LL.D., F.R.S. (Secretary, Department Industrial & Scientific Research) said "the fullest credit must go to the radio amateurs for the great discovery of short waves." Later in his speech he referred to the historic first contact between Cecil Goyder (then a Mill Hill schoolboy) and now Chief Engineer of the All India Broadcasting Company and Frank Bell of New Zealand—a contact which he stated paved the way for many more outstanding achievements by radio amateurs.

Sir Edward's pioneer work in connection with the development of the technique upon which Radio-Location is based has earned for him recognition from many quarters. He receives our warm thanks for paying a tribute, in the presence of a large trade audience, to the radio amateurs of Great Britain for their pioneer work.

The Birmingham Victory P.D.M.

At the Victory P.D.M. held at the Imperial Hotel, Birmingham, on Saturday, May 26, 1945, headquarters were represented by Mr. E. L. Gardiner, G6GR (President), Mr. W. E. Russell, G5WP, Mr. F. Charman, G6CJ, and Mr. J. Clarricoats, G6CL (General Secretary).

Lunch was served at 1.30 p.m. after which G6CL Dutch Auctioned a bottle of whisky presented by GM6UU for the benefit of the P.O.W. Fund. The sum of £25 was raised with G6CL still in possession of the bottle!

The President opened the business meeting at 2.55 p.m. and extended greetings on behalf of Council to all present. Mr. Clarricoats then spoke about the Society's post-war policy and gave an account of the discussions which had taken place with the Post Office. "Clarry" finally thanked the meeting for listening to him for 1 hour and 7 minutes!

Mr. V. M. Desmond expressed his appreciations to the three members of Council and to Mr. Clarricoats for their attendance and to the T.R.'s and District Scribe for their assistance. Ft./Sgt. Snowy Campbell, VK3MR, a P.O.W. since 1941, later gave an account of some of his experiences.

After tea had been served at 5 p.m. the meeting broke up for informal discussions.

The following were among those who signed the register: G2AK, 20U, 2XX, 3HB, 3SH, 3YI, 3HB, 4CO, 4CR, 4KC, 4MN, 4OT, 5BJ, 5GR, 5SS, 5YY, 6WI, 2AGS, BKZ, BOZ, FDR, FXT, BR54240, 4748, 5872, 6072, 6197, 6975, 7515, 7666, 7797, 7836, 9766. 2FDR.

First News from the Channel Isles for Five Years

Writing under date of May 9 (VE Day plus 1), Mr. Herbert E. le Dain, G4LI, sent a first-hand account of radio activities in the Channel Islands during the German occupation.

We quote extensively from his letter, well knowing that his many friends will be interested to learn how he applied his radio knowledge to the common cause.

He writes:

"Yesterday for the first time for nearly five years I was able to wear the R.S.G.B. badge openly. The Huns had forbidden the wearing of all badges, but they could not prevent us carrying them in our pockets.

"All radio sets were confiscated and taken off to France, and heavy punishments were inflicted (including deportation to prison camps) on anyone caught with a set. In spite of this a great many of us carried on—the stories of improvisations and disguises would fill several volumes. At the moment I am listening to the B.B.C. programme with a small, almost pocket, one-valve, amplified through an electric gramophone. Last night practically the whole village assembled in the school to hear the King's Speech, using this arrangement. Crystal sets have, of course, been in great demand especially after the electricity supply failed through fuel shortage; here again the results have been amazing, the A.E.F. programmes coming through perfectly, and at times the Home Service and "America in Europe" could be picked up, although fading usually spoilt reception. This bugbear was absolutely absent on the A.E.F. programme.

"The smallest set that I have seen was built in a Regal gramophone needle tin. Headphones proved a great snag, but it was overcome in lots of cases by the use of ordinary telephones, so much so that the local telephone authorities have an advertisement in the local press to-day asking crystal-set users to replace their phones, and to disconnect their sets from the overhead wires (the phones have been out of action for some time). Telephone and overhead electricity wires have proved excellent aërials, so have wire mattresses."

Mr. le Dain is now living at The School House, St. Mary, Jersey, and we have no doubt he will welcome letters from old and new friends.

No news has yet been received from other members who were in the Channel Islands at the time of the occupation.

Congrats

● To Gnr. Eric Chapman, BR55404, of Portsmouth, on his recent engagement to Miss Joan Holwell, of Tunbridge Wells.

Letters to the Editor

Propagation of Radio Waves

DEAR SIR,—I am very interested in the articles now appearing in the Society's journal on the "Propagation of Radio Waves," and I think that Mr. Briggs (2FJD) has set out the subject in excellent form, but I do not quite agree with certain figures in Part I. To quote: "Due to weather effects, the troposphere is constantly in a turbulent condition, but on the average the temperature falls uniformly as we travel upwards from the ground, at the rate of about $5\frac{1}{2}^{\circ}\text{C}$. per 1,000 feet and at the top of the troposphere it has fallen to -53°C ."

To me this does not seem to be correct, and my interpretation of a "uniform fall" is a linear fall, and if this is the case then... [Mr. Gale then shows by a numerical calculation, that if the temperature falls uniformly with height at the rate of $5\frac{1}{2}^{\circ}\text{C}$. per 1,000 feet, and if the temperature at the surface of the earth is 60°F ., then the temperature at 15 Km. height must be -254°C . This is inconsistent with the figure of -53°C . which is given as the temperature at the top of the troposphere].

I am sure Mr. Briggs would be kind enough to elucidate for me this small, but annoying point, and show me perhaps, where I may be wrong.

Yours faithfully,

F. E. R. GALE (BRS9113).
(Gnr, O.F.C.).

C.M.F., 29th March, 1945.

DEAR SIR,—I must thank Mr. Gale for pointing out the mistake in Part I of my article. The figures which are inconsistent were obtained from different sources, and I must admit that I had not troubled to check their consistency.

The figure of -53°C . for the temperature at the top of the troposphere is certainly correct. Unfortunately, I cannot remember from what source I obtained the figure of $5\frac{1}{2}^{\circ}\text{C}$. per 1,000 feet for the rate of fall of temperature with height, but it must be wrong and should be about $1\frac{1}{2}^{\circ}\text{C}$. per 1,000 feet.

Yours faithfully,

B. H. BRIGGS (2FJD).

Standard Receiver Advocated

DEAR SIR,—With reference to Mr. A. J. Ward's letter in the April issue, I suggest a good basic receiver of standard design could be sold as a kit of parts, in separate sections, with a standard chassis "pressed out" for the complete receiver, and arranged so that the detector, a double-diode-triode, comes somewhere near the H.F. stage. At first a simple T.R.F. receiver could be built and this arrangement could later be converted into a basic superhet and then added to until it is a 7-valve job as suggested. This arrangement would allow the constructor to overcome any minor snags which the new sections introduce.

Yours faithfully,

W. E. GAY (BRS9772).

DEAR SIR,—I am very interested in the suggestions made by G3WD in the April issue.

My idea of a standardised kit-set however, is rather more elaborate, and I should like to see a 10-valve job comprising:—

- (1) Tuning range from 1.7 to 30 Mc/s. (2) Full dial bandspread between 3.5 and 14 Mc/s. (3) Two R.F. stages, with high gain ahead of the mixer stage. (4) Two I.F. stages. (5) Variable selectivity on crystal filter. (6) Noise limiter. (7) "R" meter. (8) A.V.C. (9) B.F.O. (10) Separate R.F. and audio gain controls. (11) Plug-in coils.

It should have complete shielding to overcome R.F. pick-up, and the I.F. stages should give good selectivity, without the crystal, and sufficient gain for correct A.V.C.

Panel controls other than the tuning should be crystal rejection, R.F. and A.F. gain, threshold adjustment for noise limiter, cut-out switch for A.V.C., B.F.O. switch.

The price would be somewhat higher than the £10 suggested by G3WD, but could still be made quite reasonable.

I hope that manufacturers can be persuaded to develop a kit-set or I am sure it will be very popular.

Yours faithfully,

W. BAKTHORPE (BRS5872).

DEAR SIR,—As a newcomer to the R.S.G.B. and also as a serving member of H.M. Forces, may I be permitted to add my views to G3WD's, re the standard receiver? Finance must inevitably restrict the keenest amateur in the field of radio communication, and for the greatest possible efficiency the minimum amount of restriction is essential. Naturally it is not possible to waive financial restrictions completely, but to many whose circumstances are similar to my own, the production of a standard receiver, at a price within reach of the struggling enthusiast would be a great incentive. The potential market for this set would surely warrant its introduction?

A set on the lines suggested by G3WD would be welcomed by hundreds of members. I am in agreement with the exclusion of a speaker, for I have found in practice, that for long distance work and especially for telegraphy, 'phones claim the laurels. I should like to see, in addition to the points already raised, a smooth-actioned reaction control (a great failing in many sets), and a good quality mains transformer. If the components used are to be of inferior quality, the whole aim will be defeated. It is difficult to

suggest a receiver which is of first-class construction and yet produced at a low cost, but if the set is limited to bare essentials, and those essentials are of good quality, I see no reason why the idea should not bear fruit.

The Society has accomplished much in the field of radio communication and research—its future accomplishments depend largely on the "Juniors" of to-day, but they have suffered serious set-backs. Any small aid will be repaid in loyalty and unselfish devotion to the common cause. Financial restrictions can be, and should be alleviated as much as possible.

Yours faithfully,

A. WARD (BRS8273).

Standard Receiver Not Advocated

DEAR SIR,—I have read with a certain amount of misgiving the letter from A. J. Ward, "A Standard Receiver Advocated," and your Editorial in the April issue.

It seems to me that someone is missing the point somewhere. We in the Society claim to be radio amateurs—men with a high standard of education and ability—yet we are going on our hands and knees to get some set manufacturer to do our work for us. What a disgraceful state of affairs when we cannot even build our own receiver! Surely we have no right to claim membership of the Society until we can do so. What is there difficult in a 7 valve set as suggested by your correspondent? If his proposal be carried out, every handyman who has built up a Skyscraper kit is entitled to call himself a radio engineer!

But seemingly your bogey is components. I am afraid I cannot agree that these are difficult or expensive to obtain. I have been pursuing this hobby since I was at school and have always found manufacturers most helpful, in fact during the past 12 months whilst in the Forces I have built a 9 valve 2 I.F. job, a normal 4 valve superhet, a valve voltmeter and audio oscillator without encountering any difficulties.

It seems that enthusiasm is lacking nowadays. This quality can overcome all obstacles and produce an I.F. transformer from a piece of curtain rail and a coil of wire with ease, and there is far more pride in the finished job than if this were bought from a manufacturer.

For the same reason it laughs at this ugly word "cost" and looks only at a perfect job—a job well done even if it has meant sleepless nights and lunchless mornings.

Yours faithfully,

GEOFFREY W. GABB (BRS3223).

Proposed Headquarters' Station

DEAR SIR,—The views published regarding a post-war Headquarters' station have been followed with interest but so far no reference has been made to "North of the Border." May I break the silence? Personally I can see no practical reason for such a station if it is to be used for local and DX work on allotted bands. Furthermore, I feel, that it would have no practical use as a means for "broadcasting" to amateurs. What is there to tell us? If R.S.G.B. funds are to be used, I suggest that three or four amateurs (chosen by Council, and situated in Districts which will adequately cover the British Isles) be provided with gear to enable them to radiate standard frequency signals at pre-arranged times, and on frequencies suitable for good reception in their Districts during these hours.

A memorial to members who have made the Supreme Sacrifice is the earnest desire of us all. What better than a Headquarters' Club in Central London? I also feel, that provision for a laboratory, suitably furnished with equipment, should be opened in Glasgow. After all, the GM's have made their full contribution in both men and money, and surely no one will grudge expenditure to the country which produced men who made Television and Radar possible. Let the GM's speak up now before it is too late.

Yours truly,

J. K. McDOWALL (6M3AR).

[Editorial Note.—The GM's, not forgetting the G's, the GI's and the GW's, will have every opportunity of speaking up before it is too late, because the suggestion to establish a Headquarters' station, like other post-war projects will not be fully considered until the majority of members are released from their Service duties and are free to speak for themselves.]

The suggestion has already been made that Experimental Workshop Centres should be set up after the war.]

DEAR SIR,—I have read with very great interest of the splendid efforts made by the Society, and suggestions offered by members, in connection with post-war activities.

An item of particular interest to me is the suggestion to establish a Headquarters' Station. I support and agree with the proposals made by Mr. Peter Bradley (G8KZ), in his letter published in the April issue. May I add two suggestions of my own?

I think that the station, operated by licensed members, should work to a definite published time schedule, periods being set aside for various tests as requested by other members.

Secondly, I feel that valuable "time and space" on the air can be saved if facilities are offered to new transmitting license holders, for training in operating and procedure. The ex-Serviceman operator will probably be very tired of rules and regulations and this may result in a tendency to over relax. Also there are many

brilliant and gifted men in the world of Radio who have no practical operating experience. I think you will agree that we must insist on a very high standard of operating if it is to be left on our crowded bands for constructive experiments.

As a qualified Army instructor I should be only too pleased to offer some of my post-war free time to assist in this direction, perhaps by the provision of a friendly but firm monitoring service. Best luck for the future.

Yours truly,
D. W. J. HAYLOCK (Capt.) R. Sigs. (BRS6062.)

The Post-War Amateur Market

DEAR SIR,—Your Leader in the April issue, and the letter on the same subject from Mr. James Hunter, make interesting reading to one very fully engaged in the distributive trade. Mr. Hunter's comments on "sales policy" are somewhat amusing. He says that the majority of amateurs had contacts which enabled them to secure goods handled through factors and wholesalers; thus (he admits) the retailer gained nothing! There is undoubtedly a good deal of truth in this, and I hope Mr. Hunter and his enthusiastic colleagues feel somewhat red in the face at this public admission that they use the dealer merely as a convenience for getting valves and components tested, free advice and so on. There is much talk going on, and fantastic numbers of Associations are being formed, with the object of preventing just this state of affairs. Human nature being what it is, however, no doubt in some measure it will go on. There is a very large influx of "phony" backroom "wholesalers" who have come into being recently, flourishing on the apparent shortage of merchandise, and these people at least will always be glad to take anybody's money; although, speaking from 20 years' close observation, some of the old-established and apparently reputable houses are not above it. There are, of course, other aspects of the matter. It is a fact that the vast majority of dealers are too lazy or too indifferent to carry really comprehensive stocks. No doubt it is a kind of vicious circle—the amateur will not buy from the dealer because he cannot get all he needs, and the dealer will not carry complete stocks because the indifferent support from the amateur does not justify it. First move seems to be up to the dealers—but only if they can be certain that any Tom, Dick or Harry cannot buy a single article at the same price that they have to pay for quantities!

Even now, after six years of war, the shortage of really good component parts is largely imaginary. Except for really difficult items such as electrolytic condensers, there is an adequate supply of all the merchandise the keen amateur needs, and in my own case I often obtain stock of goods normally restricted to Service requirements by a special allocation granted by I.S.C.C., who realise the value of the service I am giving.

As to the difficulty of competing with American imports, in my opinion much of the appeal of pre-war American merchandise was based merely on novelty; and on the fact that there was a copious supply of American literature available, which amateurs chose to copy slavishly—even to valve types—rather than make the necessary adaptations to incorporate British components and/or valves. There can be little other reason for the use, for instance, of many American-type valves, as most British counterparts are far and away ahead.

In conclusion, as one of the oldest-established dealers specialising in components and material for the amateur, and having gone to inordinate trouble to keep the enthusiasts supplied through all the difficult times, I do hope that when goods are more freely available, bona-fide amateurs will support the dealers who have done the donkey-work, and not seek back-door supplies. Let my effusion be construed as an advertisement, you had better make it anonymous, or give it a non-de-plume, if you should decide to publish it.

Yours faithfully,
R. H. COSKY (BRS9747).

[Editorial Note.—The sentiments expressed by Mr. Cosky in the last sentence of his letter are appreciated, but as it is not the policy of the Society to publish correspondence from anonymous writers, his name appears.]

Commercial Morse Standards

DEAR SIR,—As a Radio Officer in the Merchant Navy I was interested to read BRS5653's letter on good Morse.

Having sailed in Far-Eastern waters during 1938 I endorse his view regarding the high standard of Japanese operators but would quote British and American commercial station operators as being equally good (i.e. WSL, WCC, G.L.D., GKU).

I do not, however, agree that either British or American naval operators are good. I have found it a painful experience working on 600 metres with H.M. ships in peace-time and the coast stations at Gibraltar, Aden and the Falkland Islands, as well as the U.S. Naval station at Balboa. These are classic examples of what operating should not be. I think any merchant-ship operator would agree as would also the operators at Lands End radio who I have often heard struggling with certain stations.

Therefore I say, for good Morse listen to the British G.P.O. stations, or a British, American or German merchant ship (peace-time operators).

Yours faithfully,
E. ROBERTS (BRS9261),
1st Radio Officer, British M.N.

Co-Operation Sought

DEAR SIR,—My particular interest is in the design and construction of compact receiving apparatus and small components. Apart from "walkie-talkie" equipment, I think receivers and components are made unnecessarily bulky. A little thought in design would greatly improve matters. I should like, if possible, to make contact with other members who are similarly interested.

Yours faithfully,
E. A. V. MONTGOMERY (BRS9817),
271, Vauxhall Road, Liverpool, 5.

Book Review

THE RADIO AMATEUR'S HANDBOOK. (22nd Edition. 1945). By Headquarters' staff of the American Radio Relay League, Inc. 1278 illustrations, 133 charts and tables, 240 formulae. Available through R.S.G.B. price 10/6. Delivery 3 months.

The latest edition of this famous book arrives at a time when most amateurs—whether in the Services or elsewhere—are doing a spot of post-war planning, and is doubly welcome for the introduction it gives to some branches of the latest technique in radio.

The "Fundamentals" have been improved by additional material on filters, wave guides, resonant cavities, and piezo-electric effects, etc.

Cathode followers, time-base circuits, trigger circuits, pulse technique, klystrons, multi-segment magnetron with resonant cavities are now included in the "Vacuum Tube" chapter. Co-axial line oscillators are added to the chapter on "R.F. Power Generation." The "servicing of superheterodyne receivers" has been improved by illustrations of C.R.O. traces of response characteristics, including crystal filter cases.

The Aerial section is revised and includes details of the Alford loop, turnstile and various wide-band arrangements such as folded dipoles and conical aerials.

A panoramic adaptor for any type of communications receiver is described, and the V.H.F. and Measurement sections are considerably reorganised and augmented.

T. P. A.

Wireless Telegraph (Control of Valves) Order, 1945. (SRO 1945/476.)

The following announcement appeared in *The Wireless and Electrical Trader*, dated May 19, 1945:

"Manufacturers may now supply, and dealers may resell, valves with an anode dissipation exceeding 10 watts without the necessity for a permit.

The Postmaster-General has made the Wireless Telegraph (Control of Valves) Order, 1945 (S.R. & O., 1945, No. 476), which has the effect of causing S.R. & O., 1939, No. 1689, to cease to apply to valves exceeding 10w anode dissipation.

The original Order prohibited, except under the authority of a permit, the sale, purchase, letting, hiring, supplying, disposing of, acquiring or distribution of wireless and other electrical apparatus of specified kinds, including valves as mentioned above. It should be noted that it is only the clause (paragraph f) relating to valves which is revoked under the new Order. Form T99G, which was used when applying for a permit, will no longer be necessary."

Sympathies

Are offered to Sgt. W. T. Creighton, R.A.F., BRS4242, of Enniskillen, N. Ireland, whose wife died two days after giving birth to a daughter (Maureen Margaret Elizabeth) on March 20 at a nursing home in Darlington.

Hospitality Offered

Mr. W. J. Barker, G3NQ, 104 High Street, Herne Bay, will be pleased to extend hospitality to members visiting that town.

Silent Keys

It is with deep regret that we record the passing of these members:—

- Leading Radio Mech. Alan Catherall, BRS8532, of Holloway, London.
- Flight Sergeant G. W. Crawley, R.A.F., BRS4276, of Hemel Hempstead, Herts.
- Flying Officer T. G. Morris, R.A.F., BRS4234, of West Letchworth, Herts.
- Sergeant Robert C. Russell, R.A.F., BRS5826, of Horley, Surrey.
- Police Sergeant J. L. Stoddart, G6XO, of South Shields.
- Sgt. Stoddart was a native of Kirkcaldy, Cumberland, but joined the South Shields Police Force about 17 years ago. During the war years, he had been A.R.P. instructor and was promoted to the rank of Sergeant in 1941.
- Flight Sergeant James Wood, R.A.F., BRS5420, of Perth, Scotland.
- Flight Sergeant G. C. A. Zedy, R.A.F., BRS3732, of Maidenhead, Berks.

The Kreigies Return Thanks

FACTS AND FIGURES

During the past five years the R.S.G.B. Prisoners of War Fund sent

357,430 Cigarettes
8,480 ozs. of Tobacco
2,007 New Books
99 New Games
23 Sets of Music

Made up into 1,329 Parcels

TO PRISONERS OF WAR IN GERMANY

WELL DONE G8TL!

DEAR SIR,—I wish to express my gratitude to you—and through you to the members of the R.S.G.B.—for the incredible generosity of the Society in sending me parcels during my four years as a prisoner of war.

I have received from the Society thousands of cigarettes, many books, games, a most welcome kit bag and case. Such generosity is quite overwhelming and it is impossible for me, in words suitable, to express my gratitude.

The cigarettes were not only sufficient for my own needs but in times of acute shortage, I was able to help my friends who were as amazed as I was myself at the open-handedness of this Fairy Godmother of a Society. The books I read and passed on to others to enjoy and the kit bag was very timely in its arrival.

These gifts from the R.S.G.B. have materially lightened the burden of Prisoner of War existence, not only for myself, but for those about me. I have always made it clear that these parcels I constantly received were gifts from the Radio Society of Great Britain.

It is wonderful to be home again and I am glad to say I am one hundred per cent. fit.

Thank you very much Mr. Edwards for your organisation and thank you very much members of the R.S.G.B. for your incredible generosity.

Yours sincerely,

D. GORDON BLAIR (G8VU).

DEAR SIR,—Just a few lines to say that I've reached "G" all okay after somewhat of a "DX" hike, about 950 km. . . . I must again thank you and the Society for the numerous cigarette and book parcels . . . a kindness I shall never forget for our only luxuries there was a really good smoke and the food parcels of the Red Cross. Thanks a lot for all you have done to make the past years endurable—maybe you will be interested to know I reached home with the R.S.G.B. kitbag complete with the remains of my belongings—it has been so useful.

Yours Sincerely,

P. B. BRISCOMBE (G8KU).

DEAR SIR,—Here's reporting my safe arrival back in England after 4 years and 11 months as a Kreigie and what's more important, here's expressing many thanks indeed for all that has been done for us chaps, while we have been away, believe me, the books and cigs were more than welcome.

• Have a pile of BULLS on the table but the family won't let me get down to them yet! Five years and three months of them!

Yours sincerely,

H. G. CUNNINGHAM (ex G5CI-ZBIA).

DEAR SIR,—Would you please accept this short note as a totally inadequate expression of my gratitude for all that you and the Society have been doing on our behalf these past few years? Books, cigarettes, kitbag—thanks again for everything. Unfortunately there are still the fellows out East to be cared for, but I imagine they have not much longer to wait!

Mother has shown me your kind letter of April 22, glad to say I am not in need of any special treatment.

Yours very sincerely,

NORMAN DUCE (BRS2600).

DEAR SIR,—I am safely back and would like to express my very, very sincere thanks for all you and the Society have done for me while in Germany. Many of your parcels of cigarettes etc., arrived there safely and made a big difference to our comfort. Yes, I have certainly weathered the storm O.K., 5 years in the bag with not a single day in bed, passed fit this end and apparently looking just the same.

Again many thanks for all your help and with best wishes.

Yours truly,

DENNIS FLOWER (G8TO).

DEAR SIR,—I am writing to inform you of my return to England, and to express my appreciation and thanks to those who contributed to and managed the P.O.W. Fund. It is gratifying to find that in spite of the many changes during the last 6 years the Society retains that personal contact that is an essential part of the amateur movement.

The whole organisation, the choice of articles and their method of despatch, correspondence with our families and the manner of dealing with our individual requests, were carried out in a way that deserves the highest praise.

Yours sincerely,

E. MARK FROST (BRS2692).

DEAR SIR,—I should like to express my appreciation of the magnificent way in which you helped to make our days as P.O.W. so much more pleasant.

While the Italian and German transport systems were in a reasonable state of repair we received parcels of cigarettes and books regularly. Latterly however, as we all know the Allied Air Forces were responsible for a not inconsiderable amount of disorganisation to the lines of communication in Germany. Consequently parcels and letters were few and far between.

Would you please thank all those who made this possible by their generous contributions to the P.O.W. Fund?

Sincerely yours,

R. M. GARRETT (G3PB).

DEAR SIR,—This is a brief line to thank you for the extremely fine service you have been running on our behalf. It must have given you a lot of work but we most certainly appreciate the results of your labours. It is not easy to explain how much those parcels meant to us. It was not merely the contents, but the kind thoughts behind them that did so much to banish that feeling of isolation which got us all at times.

Yours sincerely,

ANTHONY LISTER (G5LG).

OUT OF THE BAG

Up to the time of going to press, 27 Members are known to have been liberated from German Prisoner of War Camps.

DEAR SIR,—I have just returned to this country and wish to take the first possible opportunity of thanking you and the Society for your generosity and good work for the P.O.Ws. I also wish to thank you . . . for offering help for any medical treatment required. Fortunately I am in fairly good health.

Yours sincerely,

MALCOLM R. MACARTHUR (G4LB).

DEAR SIR,—I would like to thank you for all the parcels you have sent me and other Kreigie Hans, they were always excellent in quality and selection. I would also like to record my thanks to all those who have donated to the Fund.

Sincerely yours,

M. L. QUARTERMAINE (G3FZ).

DEAR SIR,—May I take this opportunity of thanking everyone for all they have been doing for the P.O.W. It is very nice to feel that although a prisoner a very long way away one is by no means forgotten. Believe me, the people at home have been doing a grand job and I hope that it has been appreciated by all the P.O.Ws.

Yours sincerely,

JOHN TRUSCOTT (BRS3013).

DEAR SIR,—I would like to thank you first for offering to help if I needed treatment. I am happy to say I am in reasonably good health, and under the careful attention of my wife it won't be long before I'm back to pre-war standard.

During my stay as a Guest of the Germans I received two lots of 1,000 cigarettes. When I got these, things were going pretty rough for us in the way of rations, but as I was at a working camp it was possible to bargain with the Germans. So you can imagine how thankful I was to receive the parcels.

I would like you to convey my deepest gratitude to the R.S.G.B. and all concerned in the welfare of the P.O.Ws., for the grand job of work they have done.

Yours sincerely,

GEORGE WAKEFIELD (G5WG).

Editorial Note

Undoubtedly many parcels failed to reach our P.O.Ws. Headquarters' records show that nearly 6,000 cigarettes, in addition to books and tobacco, were sent to L./Cpl. Wakefield.

(Continued on page 192)

KHAKI and BLUE

Cairo Meeting

Due possibly to the expectant news of Victory in Europe and to the fact that many amateurs have left the M.E., the meeting on May 6 did not produce the usual large attendance at the Bystander, Cairo. Twenty-four stalwarts attended the morning session, whilst a further 18 arrived later in the day to hear an excellent lecture given by Major Eric Vast, B.Sc., A.M.I.E.E. on "Recent Developments in Quartz Plate Processing." In confident style and with a masterly knowledge of the subject, Major Vast dealt with various types of crystal, their origin and formation. He also demonstrated acid finishing, etching, and spluttering with gold, aluminium, etc. The various exhibits were most interesting.

During the dinner which followed, a copy of the R.S.G.B. statement on post-war licence policy was handed to all present and a vote of thanks passed to the Council of the Society for their successful efforts on behalf of British amateurs. A vote of thanks was also passed to Major Vast for his lecture.

To the regret of all present it was announced that this would be the last meeting that Mr. W. E. Marsh, SU1WM, would be able to organise. By the time this appears in print he should be on his way home to England. We wish him good luck and thank him for all he has done in Egypt for Amateur Radio.

A message of greetings signed by those present at the recent Leeds P.D.M. was read. Several names were recognised by those who had served in the M.E. during the war.

After photographs had been taken, the party broke up to discuss post-war licence policy and station planning.

Amongst those present were: VS1AL, SU1HB/VU2JO, SU1TM, 1AX, 1WM, 1RO, 1RD, 1CR, 1KE/5KW, G3ZY, 3CV, 3TG, 4PF, 5ND, 5WZ, 6IX, 6RF, 8DA, 8PI, 8HW, 2DYK, FAZ, BMC, FR893, 4S, BERS430 and BR89758.

Cairo Club meetings are still being held at J. Green & Co., near the Roman Catholic Cathedral at 7.30 p.m. on the last Saturday of each month. Those not yet in touch with members of the Alexandria or Cairo groups should communicate with Major Ken Ellis, Forces Broadcasting, Cairo, for the latest news regarding meetings. His telephone number is Cairo 45406 or ME 1650.

K. E. S. E.

● During the past month the General Secretary has been pleased to extend a welcome to Major E. R. "Ted" Cook, G6UO-ZS6BT, who was well known in the late 1920's for his low power transmissions from Gainsborough, Lincs. Major Cook has been resident in South Africa for the past 15 years where he has operated as ZS6BT. He is now on Liaison duties in connection with the South African Corps of Signals.

● Another welcome visitor to H.Q.s. last month was Ft./Lt. W. H. ("Bert") Allen, G2UJ, who has just returned from a special mission which was made more pleasant through contacts with leading amateurs of the country he visited.

● Cpl. P. Nicol, R.A.F., G5ZN, who has just arrived home after serving for 3 years as a Radar mechanic in India, would be pleased to contact old friends via his home address, 35 Reedley Road, Burnley, Lancs. G3MB returned with him.

● Ft./Lt. Ian Clark, 2BIB, whose address is now 342 Mobile Wing, H.Q., S.E.A.A.F., would like to hear from all friends, especially 2AAN and the Whitstable gang. G4IB has been working with 2BIB and between them they seem to have been trying out numerous ham dodges. They have acquired an 829 Sky Traveller from an American Signal Corps "type" who lives near them but are "stumped" for the circuit diagram. Can anyone oblige?

● Ft./Lt. W. Smith, G5WZ, who has been in the M.E. for some years expects to return home in August. He sends greetings to all old friends in District 19, and looks forward to a happy reunion with them. G5WZ was mentioned in despatches last January.

● Friends of Sq./Ldr. Jack Hum, G5UM, will be interested to hear that he is now working with Sq./Ldr. Frank Adams, G2YN, in New Delhi. His immediate chief is Humphrey Andrews, late of Dubilliers, who operated from Highgate as G2TA until 1929—one of the old 1,000 metre spark hams! On his way to India, G5UM met Sq./Ldr. Ted Laker, G6LK, at the M.E. Maintenance Unit.

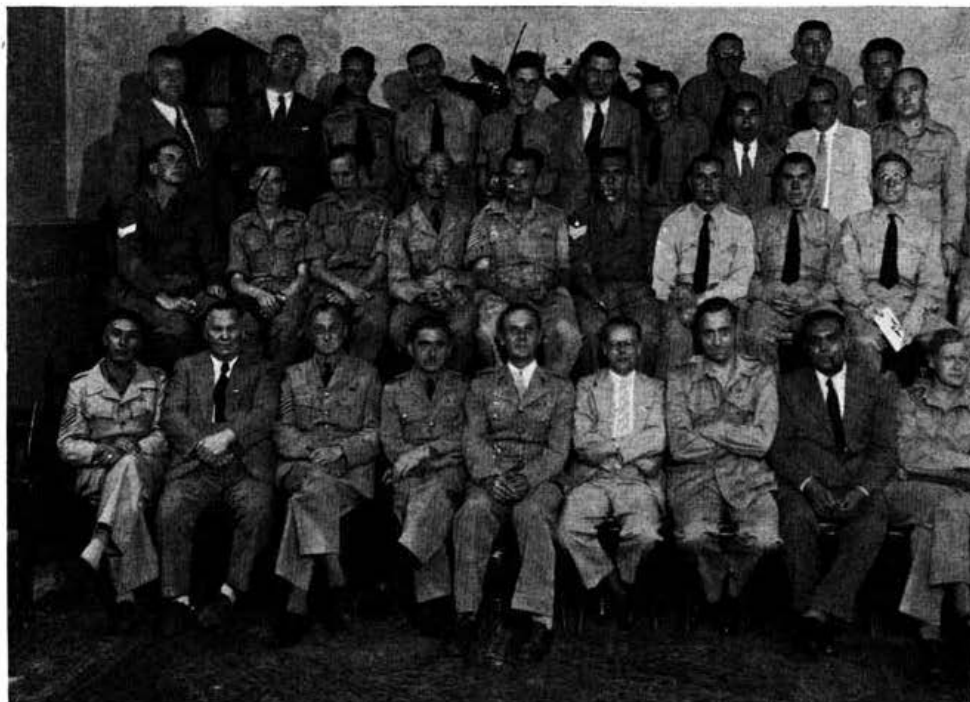
LA6A and LA9N Return Thanks

Lt. Jon K. Brynildsen, LA9N, and Capt Lars Heyerdahl, LA6A, having now returned to Norway, ask that their thanks be recorded to all members of the Society who, during the past four years, offered them hospitality.

We hope the time is not far distant when they and all other loyal Norwegians will be back on the air renewing old friendships.

The R.A.F. in Berlin

Members stationed in the German capital are asked to contact Ft./Lt. Standley, G8RW, or Cpl. D. T. Boffin, G3HS, at M.S.U. 5275B, R.A.F. Unit, Berlin. An attempt is being made to form a United Nations Amateur Radio Club in the city, or what is left of it!



CAIRO MEETING—MAY 6th, 1945

Major Ken Ellis, SUSKW, is in the centre of the front row with Mr. W. E. Marsh, SU1WM, on his left.

BRITISH ISLES NOTES AND NEWS

**CLOSING DATE FOR JULY ISSUE
IS JUNE 30th. - REPORTS SHOULD
BE POSTED TO REACH D.R.'s AND
SCRIBES BY JUNE 26th.**

DISTRICT 1 (North Western)

D.R.: H. W. Stacey (G6CX), "Sandless," Edisbury Road, West Kirby, Cheshire. **Hoylake 337.**

Ashton-under-Lyne.—At the meeting held on May 20 the forthcoming P.D.M. was discussed. Morse instruction followed.

The next meeting will be held on June 17 at A.C.S. Educational Rooms, Stamford Street, at 2.30 p.m. **G5PX.**

Bolton.—"Early Bird" Cpl. Harold Willets, 2FPI, was married on May 21 to Miss Bertha Ramsden at Farnworth. 2ABF and DVQ were present on behalf of the local members. The founder members of the Bolton Radio Society celebrated Harold's departure from the ranks of the bachelors by presenting him with a set of Stuart Crystal water jug and glasses. Cliff Higham (R.E.M.E.) is on a training course in G.M. **2DVQ.**

Carlisle.—The Carlisle Amateur Radio Society has eleven members and meetings are held regularly. A Morse class is to be organised and a series of lectures have been arranged for future meetings with, as far as possible, practical demonstrations. G3HJ is still in the R.A.F. **2AYH.**

Darwen.—The meeting held on May 3 was in the nature of a "VE" celebration. The T.R. had much pleasure in welcoming Mr. J. E. Whittle (ex-P.O.W.), recovering from a forced march of 600 miles as a new member. His own son has also recently returned as a liberated P.O.W., in good health. G4JS is to talk about "Metal Cabinets and Screening" at the next meeting. It was agreed that a Club Room should be found in Darwen. **G8FI.**

Oldham.—The April meeting was held at 2HC with only four members in attendance. 2MQ gave a short talk on the use of vector diagrams with particular reference to the "Wien Bridge" type of audio oscillators. The next meeting will be at G3PD, 26 Bargar Road, Oldham, at 6.30 p.m. on June 24. **G2MQ.**

Liverpool.—At the meeting held on April 28 it was agreed that in future meetings should be held on the last Saturday of every month. Mr. Spears, G8AZ, undertook to conduct the proposed "Library of Technical Information," and invited each member to send him a list of the text books, circuit diagrams and radio journals he is prepared to lend at any time. Those wishing to refer to a particular book should write to SAZ, who will put him in contact with the owner of the book required. His address is 72 Rocky Lane, Liverpool 16. It was agreed that at each meeting, time should be set aside for questions and answers, on the basis of a radio "brains trust": offers were also invited for the demonstration of test and other equipment.

At the meeting held on May 26 Mr. Menzies, G5MQ, explained and demonstrated a police radio equipment. The D.R. has sent a letter of thanks to Chief Supt. Nichols for granting the necessary permission and facilities. Mr. Williams, 52 Church Road, West Kirby, has offered to manage a "Components Exchange." Please send him a list of articles you have for sale or exchange, and a separate list of what you require.

A discussion on post-war licensing disclosed that every question asked or suggestion made was already covered by Council's policy outlined in the March Editorial—a very satisfactory position! A period was set aside for technical questions and keen arguments resulted. Now that all the preliminary arrangements have been settled it is anticipated that future meetings will be devoted entirely to demonstrations, lectures, and open discussions and details of the programme for the June meeting will be found in "Forthcoming Events."

General.—The D.R. would like T.R.'s and scribes, so far as possible, to follow the style of the notes recorded in this issue when preparing their reports, as this will simplify his task in editing the material for publication. Space is valuable and it should be understood that notes submitted by him are themselves subject to further condensing when they reach H.Q. **G6CX.**

DISTRICT 2 (North Eastern)

D.R.: C. A. Sharp (G6KU), 56 Moore Avenue, Wibsey, Bradford. Bfd. 10772. **Scribe:** H. Beadle (G8UO), 13 Chandos St., Keighley.

Bradford.—All members are invited to a showing of R.S.G.B. films at Cambridge House, 66 Horton Lane, Bradford on June 29 at 7.15 p.m. The D.R. recently met 4JB in Halifax, he sends 73 to all. Sympathy is extended to 4GJ in the loss of his father.

Doncaster.—Mr. H. Flintham, BR5193, 50 Burton Avenue, Baby has been appointed acting T.R. for Doncaster. Please support him in local activities. 2AGH (BLA) has built a one valve receiver with excellent results. G8FW who sends 73 to 3NJ, 3VG, 3WQ, 4OY, 5GJ, 8BA, 8IC and 2FZJ, regrets he was unable to attend the P.D.M. He says 4OY is in Italy and 8IC is experimenting with U.H.F. receivers. 2FZJ is in India.

Huddersfield.—A meeting will be held at 12 Langley Terrace, Crosland Rd., Oakes at 7 p.m. on Sunday, June 24. 5VD extends a special welcome to those who have not previously attended.

Keighley.—G2VO recently carried out an "inspection" of a damaged German automatic telephone exchange and says it is more damaged now! 2CPF who sends 73 to 2VO and 8UO has been abroad for four years having travelled from Cairo to North Italy where he now resides at the "Hotel Riviera." The Scribe recently received an interesting letter from Ft./Sgt. J. Datham who has now returned to England after a hectic time on the Continent.

Leeds.—G4MC reports again, this time from S.E.A.C. 2317 is in Bridlington until September and hopes to meet the local members. He has an Eddystone 358x. 4819 is stationed in the Orkneys.

Sheffield.—At the meeting held on May 23, 19 members discussed the Society's Post-War Policy. The outstanding feature was the proposed Class B licence of 150 watts, this power being considered in excess of amateur requirements.

General.—2AQN (CMF) who has just finished a Radio Mech. course recently met 5AZ who sends 73 to 5UX and others in the London area. Cpl. F. H. Charnley, 9958, 3 Marlborough Villas, Fulford Rd., York, wishes to contact anyone who has built a hard valve time base using American Octal valves. 3RY (BLA) comments on the high prices paid for radio receivers on the Continent. The following extract from *Radio* may be of interest to a certain G4 in this District:—"ZB2A is now a prisoner of war having been shot down in flames over Norway." Letters have been received from 3WP, 2317 and 4819. T.R.'s are needed for Halifax, Harrogate, Tadcaster and Wetherby. Offers to D.R. please. **G8UO.**

DISTRICT 3 (West Midlands)

D.R.: V. M. Desmond (G5FM), "The Chestnuts," Hanley Castle, Worcester. **Scribe:** E. J. Wilson (2 FDR), 48 Westbourne Road, Olton, Birmingham.

Birmingham.—At a meeting of M.A.R.S. held at the Chamber of Commerce, Birmingham, on Tuesday, May 15, Mr. H. W. Yeats gave a lecture illustrated by lantern slides on Auto-telephony. Thirty members and visitors were present.

The D.R. is pleased to report that C.Q.M.S. K. R. Boot is now back from the Far East and extends to him a welcome home together with all other members of District 3 who have returned from overseas service and more especially to any who have been P.O.W.

Coventry.—With the advent of Victory in Europe it is proposed to re-form C.A.R.S. Would former members kindly communicate with G5GR at 40 Medina Road, Coventry. **G5GR.**

Evesham.—Mr. H. Barnett regrets that owing to unforeseen circumstances he is unable to arrange meetings in the Evesham area. **2FDR.**

DISTRICT 4 (East Midlands)

Deputy D.R.: A. E. Clifton (G8DZ), 32 Tottenbury Road, Perry Road, Basford, Nottingham.

By the time this issue appears the P.D.M. will be very near at hand. It is hoped that a good attendance will be recorded as Headquarters have planned a surprise. See the May issue for details of this important meeting.

Derby.—An increase in the attendance at the May meeting shows promise. The evening was spent discussing oscilloscopes, audio oscillators and post-war plans.

We welcome the return of Lt. Frost, BR52692, after five years in Oflag 7B. He speaks of the good work done by GSTL and the P.O.W. fund. BR57328 requires the circuit diagram and parts list for the English Model Mc Murdo Silver type 15/17. We should like to see the oscilloscope built by BR59577. **G2OU.**

Chesterfield.—G8RQ and Mr. R. L. Grimsdale would like to see meetings started here. Offers should be made to G8DZ.

Leicester.—A few enthusiasts journeyed to Melton on Sunday, April 29, to visit G8CZ. His Morse sender aroused much favourable comment until the tape was put in reverse, much to the consternation of local C.W. experts! Contact has been made with Capt. Harry Coupland on his return from overseas, but as yet he has been prevented from attending meetings by other pressing matters. A hearty welcome is extended to 9275, 9276, 9300, 9460 and 9490.

In view of the P.D.M. no meeting will be held in June.

BR55605.

Nottingham.—A good attendance was recorded at the May meeting held at G8DZ, when G6CW gave an excellent talk on aerials. He also gave details of his work with G8JV on 56 Mc/s before the war. Following the talk a discussion was opened on the mechanical design of amateur radio equipment. It was suggested that the rack and panel system has many advantages as it permits equipment to be made interchangeable. It also enables sections to be tried out at other stations. The problem of drilling was solved when G6CW, BR57362 and G8DZ offered the use of drilling facilities to members.

A collection for the P.O.W. realised 20s.

It has been suggested that monthly meetings be held in mid-week somewhere in the centre of the town. If you are interested please advise G8DZ.

The D.R. (S/Ldr. Ridgway, G2RI) and BR56198 report fit and well from S.E.A.A.F.

The next local meeting will be held at 2FXV on July 22 at 6.30 p.m.

Northampton.—The response from members in this area regarding the restarting of meetings has not yet received much support. Those interested should get in touch with BR57888, 177, Knox Road, Wellingborough. **G8DZ.**

Forthcoming Events

- June 20 Scottish "A" District, 7.30 p.m. Visit to Stow College Laboratory, 43 Shamrock Street, Glasgow. Meet at door.
- June 23 District 15, 3 p.m., at The Excelsior Hotel, 1 Ladbroke Gardens, Ladbroke Grove, Notting Hill, W.11.
- June 23 Provincial District Meeting, 2 p.m., at Marsden's Cafe, Milton Street, Nottingham.
- June 24 District 15 (High Wycombe), 3 p.m., at G2RL, Denewood, Tottenham, High Wycombe. (Bus 363 from Town Centre to Elores Road Post Office.)
- June 24 District 5, 3 p.m., at 17 Colston Avenue, Centre, Bristol.
- June 24 District 7 (Weybridge), 3 p.m., at York House Cafe, Hangar Hill.
- June 24 District 10 (Cardiff), 2.30 p.m., at GWSUH, 29 Ladysmith Road (off Penylan Hill), Roath Park.
- June 25 District 3 (Coventry), 7.30 p.m., at The John Hough Schools. Lecture by Mr. Gardner G5GR.
- June 26 District 10 (Swansea), 7 p.m., at GW4CC, "Thistle Dhu," Upper Killay. Discussion on Post-War Plans.
- June 27 District 2, 8 p.m., at the "Dog and Partridge," Trippett Lane, Sheffield.
- June 27 District 15 (Hayes), 7 p.m., at Townfield School, Hayes. Lecture by Mr. Hayes on "Home Recording." Buses 55, 120, 140 and Trolley 607 to Coldharbour Lane.
- June 29 District 15 (Harrow), 7 p.m., at BR8527, 153 Belmont Road, Harrow. (Harrow Met. or Harrow and Wealdstone L.M.S. and Bakerloo and 18 bus.)
- June 30 District 1 (Liverpool), 2.30 p.m., at the Stork Hotel, Queen's Square, Liverpool. "The Elements of Modern Television," by Mr. R. Spears, G8AZ, and "Station Planning," by Messrs. J. Davies, G2OA, and H. W. Stacey, G6CX.
- June 30 District 12, Dinner and Dance, Salisbury Hotel, Barnet. 6 p.m.
- June 30 District 7 (Reading), 6.30 p.m., at Palmer Hall, West Street. Talk on Modulation by Mr. Ruddle, followed by discussion on Post-war Plans.
- July 1 Districts 7 and 13, Combined Meeting, 3 p.m., at Y.M.C.A., North End, West Croydon.
- July 8 District 14 (Chingford), 3 p.m., at G2XG, 7 Cranworth Crescent, E.4. (No. 38 or 145 bus to Bull and Crown.)
- July 14 District 15 (Ashford and Staines), 6.30 p.m., at 2CLL, 60 Buckingham Gardens, Feltham, Middlesex. (Southern Railway or buses.) Discussion on Transmitters.
- July 15 District 7 (Guildford), 3 p.m., at the Cafe, The Cinema, Woodbridge Road.
- July 17 Midland Amateur Radio Society, 6.30 p.m., at The Chamber of Commerce, New Street, Birmingham.
- July 21 District 15, 3 p.m., at The Excelsior Hotel, 1 Ladbroke Gardens, Ladbroke Grove, Notting Hill, W.11.
- July 22 Provincial District Meeting, 12.30 p.m., at Rougemont Hotel, Exeter. (See Special Announcement.)
- July 22 District 4 (Nottingham), 6.30 p.m., at 2FXV, 3 Broadway East, Oakdale Road, Nottingham. Discussion on Post-war Planning, followed by sale of surplus gear.

DISTRICT 5 (Western)

D.R.: R. A. Bartlett (G6RB), 31 King's Drive, Bishopston, Bristol. Bristol 46900.

Bristol.—Only nine members—a considerable decrease in numbers—attended the May Meeting. Local members were pleased to welcome two members from a nearby R.A.F. station and a member from Gloucester. The meeting was opened by 5KT who described a control desk he is constructing for his post-war station. Afterwards a discussion took place on amplifier construction. Those present included G4LW, 5KT, 6RB, 2104, 5568, 7961, 8438 and our T.R. (2BAR) who we are glad to know is well again.

The next meeting will be held on June 24 at the usual time and place. Let us show everyone that District 5 is getting off the mark with big attendances.

Swindon.—News from this area is confined to a letter from 3HS (R.A.F.) who is now in Berlin with SRW and 2CQJ. He would like to hear from other members. G6RB.

DISTRICT 6 (South-Western)

D.R.: W. B. Sydenham, B.Sc. (G5SY), Sherrington, Cleveland Road, Torquay. Torquay 2097.

Exeter.—A meeting was held at the Y.M.C.A. on May 12, when there was an attendance of 17, including G2GK, the T.R. for Torquay. There was no set programme, but a very pleasant rag chew was enjoyed and an excellent tea provided.

Penzance.—G6ZT reports that the Tuesday night meetings could do with better support. G5VV is building a superhet using a well-known American type as a model. 3KO has built a very elaborate test meter and capacity bridge. 3IV is welcomed to the area.

Plymouth.—The T.R., G3TX, reports that things are very quiet in the area. 2FKO is congratulated on the birth of another daughter. SPN was drafted to the Far East just too soon to welcome the arrival of a Junior Op. 3547 has been on leave from Italy with many radio stories and experiences to relate. 2CJB and a new member, Mr. G. Emptage, whom we welcome, meet regularly at the home of G3TX. The latter has erected a new mast and installed much heavier mains cable (!) to his shack. Will all members interested in Plymouth meetings contact G3TX? (phone 61474). G5SY.

DISTRICT 7 (Southern)

D.R.: W. E. Russell (G5WP), "Milestones," Mayford, Woking, Surrey. Woking 1589.

Bournemouth.—At the May meeting Sgt. Price, 2ADX, described his superhet short wave receiver now under construction. We were pleased to welcome 5BT of Croydon. Next meeting June 30, 3 p.m., at 45, Parkwood Road, when a debate and discussion on post-war problems will be held. A junk sale is planned for July. 2HNO.

Croydon.—At the last meeting it was suggested that a "raiding" party should attend the District 15 meeting. The eight members who formed the party had a most enjoyable time. We hope District 15 will do the same to us now that the "basic" is again available!

Morse classes are to be held at all future meetings before the main programme commences. The "Ann" Cup will be handed over to G3ST by G2DP at the next meeting. G2DP.

Guildford.—Apologies are offered to those who missed the May meeting owing to the "Bull" arriving somewhat later than usual. Twenty members turned up in spite of the lack of notice and thoroughly enjoyed talks by G6XA and G2BB on R. F. Amplifiers and Electronic Keying respectively. G2BB brought along the keying apparatus and a C.R.O. to demonstrate the characteristics of the keying.

The next meeting will be held in the cafe at The Cinema, Woodbridge Road, Guildford, on Sunday, July 15, at 3 p.m. Prior notice of proposed attendance to G5RS, 20, Hedgeway, Guildford, please!

Weybridge.—Mr. R. J. Denny, G6NK, has arranged a meeting on Sunday, June 24, at 3 p.m., at York House Cafe, Hanger Hill, Weybridge. The venue is ten minutes' walk from the station and opposite the Cricket Ground. You are requested to inform G6NK, 32, Waverley Road, Weybridge, if you propose to attend.

Coulson.—3179 called on the T.R. whilst on leave from the B.L.A. 9326, a medical student, is busily preparing for an exam. 9514, recently invalided from the R.A.F., is now on the B.B.C. engineering staff. BR83003.

Reading.—G2YI gave a talk at the last meeting on "Electronic Precipitation," which is a method of removing soot from smoke in factory chimneys. 2DIO followed with a talk on Frequency Changing.

At the next meeting, which will be a general meeting, Mr. Ruddle will speak on Modulation, after which post-war plans will be discussed. All local members are invited to attend. (See "Forthcoming Events.") G5WP.

SOUTH WESTERN VICTORY PROVINCIAL DISTRICT MEETING

to be held on

SUNDAY, JULY 22nd, 1945

at

ROUGEMONT HOTEL, EXETER

PROGRAMME

ASSEMBLE	12.30 p.m.
LUNCH	1 p.m.
BUSINESS MEETING	2.45 p.m.
TEA	4.30 p.m.

INCLUSIVE CHARGE 8/6

Reservations to Mr. H. A. BARTLETT (G5QA) "Lendore" Birchy Barton Hill, Exeter by not later than July 14th, 1945.

ALL MEMBERS CORDIALLY INVITED TO ATTEND

DISTRICT 8 (Home Counties)

Deputy D.R.: L. W. Jones, 16 Leys Road, Cambridge. Tel.: Cambridge 3406.

Cambridge.—A number of amateurs are still in the town, including G2XV, 5BQ, 5JO, 2PU, 2DT, and 5DR. G2XV, 5JO, and 2DT are known to be actively planning for the great day. Mr. S. Granfield, G5BQ, 47, Warren Road, will be glad to hear from any District 8 member, so that the notes next month may be a little more comprehensive. G5BQ.

DISTRICT 10 (South Wales & Monmouthshire)

Acting D.R.: H. H. Phillips (GW4KQ), 80 Cottrell Road, Roath Park, Cardiff. Cardiff 4512 during business hours.

Cardiff.—The May meeting drew a full attendance and members were particularly pleased to welcome F. O. Stockburn (T.R., Sunderland) whose visit to the District coincided with the meeting. Amongst many others attending were GW2UH, 4KQ, 4FW, 8UH, 8NP and G5FN. Discussions and rebuilding programmes were the main trend of topics before the meeting.

The next meeting will be held on June 24 at 2.30 p.m. and will take place at the home of GWSUH, 29 Ladysmith Road, Roath (off Penylan Hill), Cardiff.

Swansea.—GW4KQ, 2UH and 8UH, who travelled from Cardiff, were pleased to meet GW4CC on the occasion of the May meeting here. Post-war representation was the main item on the agenda for the meeting. June 26 at 7 p.m. has been fixed as the date for the next meeting which will be held at the home of GW4CC, Thistle Dhu, Upper Killay. Local members are asked to make every effort to attend.

Pembrokeshire.—G5FN, recently on leave, now hopes to complete arrangements for an early meeting at a convenient centre in the area. He reports having contacted ZB2B from whom further news has also been received. Several Service personnel appear to form a nucleus of Society members in this area. For proposed meeting arrangements, will members please communicate with S. Howell, G5FN, c/o E.R.O., Haken Point Docks, Milford Haven? (Telephone Milford Haven 340 at either 9.30 a.m. or 5 p.m. prompt daily.)

General.—The introduction of basic petrol and a slight lessening of war-time travelling difficulties, will doubtless increase attendances at local meetings and although the response to the tentative suggestion to hold a P.D.M. in Cardiff in September has been fairly good, members who would support are again reminded to advise the writer so that arrangements may proceed. GW4KQ.

DISTRICT II (North Wales)

Deputy D.R.: C. Spillane (BRS1060), "Woodside," Meliden Road, Prestatyn.

BRS5520 who is still plying the Indian Ocean has written 280 letters during the trip to date. He is anxious to contact amateurs in India if anyone can offer addresses. 2H1Y is now at No. 2 Radio School, R.A.F., whilst 4762 a Sgt. W./Op., is completing a course at No. 5 R.S. BRS4023 has met Sgt. Mercer, 2DBY of Brighton in Tripolitania. GWSWJ expects to settle in Rhyl after the war. He is still with the C.M.F. BRS9764 (Flint) has constructed a S.W. superhet around a coil-unit of his own design.

The writer having said farewell to District 17 and the R.A.F., is now on an extensive course of Infantry Training near London-derry, N.I. He hopes to meet some of the local members during his stay. BRS1060.

DISTRICT 12 (London North and Herts)

Acting D.R.: P. R. Solder (G5FA), 35 Torrington Gardens, New Southgate, N.11. Enterprise 4347. District Scribe: C. R. Stevens (2DHF), 22 Bramford Court, Southgate, N.14. Palmers Green 0548.

After carrying out a particularly onerous war job conscientiously and well for the past three years, Mr. Seymour Buckingham, G5QF, has again been forced, for health reasons, to relinquish temporarily his duties as District 12 representative. Every member who knows G5QF will join with us in wishing him a speedy return to full health.

During his absence Mr. P. R. Solder, G5FA, 35 Torrington Gardens, New Southgate, N.11, will act as Deputy D.R., whilst Mr. C. R. Stevens, 2DHF, 22 Bramford Court, Southgate, N.14, will undertake the duties of District Scribe. G6CL.

Tickets for the District Victory Dinner and Dance are going fast—those who have not yet booked should write at once to Mr. S. Howard, 92 Arlington Road, Southgate, N.14, or telephone Enterprise 3219. A grand evening is assured.

North London.—At the May meeting which was held at the home of 2DHF, Mr. H. A. M. Clark, G6OT, discussed post-war technical literature. Much interesting information was forthcoming. A talk designed to help BRS members followed.

We are glad to announce that John Truscott, BRS3013, of New Barnet, has returned home after being held as a P.O.W. in Germany for three years.

Condolences are offered to Mr. Macfarlane, G8SK, on the death of his wife.

St. Albans.—Victory in Europe having been suitably celebrated it is hoped that St. Albans will be well represented at the District 12 Dinner and Dance on June 30. Congrats are offered to G8FJ who has recently passed the Graduateship Examination of the I.E.E. and has been elected to membership of that body. Both 9265 and 3412 report trouble with "non-oscillating"

oscillators and "oscillating" R.F. and I.F. stages in their new superhets. The T.R. has been pleased to receive visits from G8FJ, 2CNC, 4477, 9135 and a prospective new member. 4477 recently received a letter from 4116 which was signed by 5216 the unit censor—which just goes to show something or other! A welcome letter has also been received from 7910 in Egypt. 9135 has been recalled to the Army after a civilian engineering course and is now on a R.E.M.E. O.C.T.U. course. G5QF.

DISTRICT 13 (London South)

Acting D.R.: S. E. Langley (G3ST), 19 Elm Gardens, Mitcham, Surrey.

District 7 and 13 combined meeting held in May was supported by G2DP, 2HP, 2LW, 2VB, 3DF, 3ST, 3TV, 6IO, 8RN, 2HHD, BRS1545, 3003, 3179, 4434, 8417, 6064, 8996, 9110, 9563, 9283, 9680. G2VB gave an interesting account of a recent visit to a local district meeting after which a discussion on post-war matters. The usual collection for the P.O.W. Fund realised the handsome sum of 37s. 6d.

G2DP's suggestion of a "crash" visit to the District 15 meeting was agreed to, with the result that a party of 8 members proceeded to Bedford Park, Chiswick, to be warmly welcomed by Peter Bradley, G8KZ, and our host BRS6275.

G3GZ still in Rhyl writes to say he is in good fettle and sends 73 to his friends. G3WN is constructing a communication receiver, incorporating some novel ideas, and is also attempting to organise local R.S.G.B. meetings. Will members near his station get in touch with him at No. 4 B.S.D., R.A.F., S.E.A.A.F. G3ST.

DISTRICT 15 (London West, Middlesex and Buckinghamshire)

D.R.: H. V. Wilkins (G6WN), 539 Oldfield Lane, Sudbury Hill, Greenford, Middlesex. Byron 3369.

Some very fine work was put in by the Acting T.R.'s who arranged five splendid meetings during May. These together with the District Meeting produced an aggregate attendance of ninety-five. This is an all-time record for the number of meetings and also for total attendance.

The District Meeting was given over to selecting further two members for the P.W. Plan committee; two Service members were chosen and are being written to to solicit their consent. Those present were G2MQ, 2TJ, 5LN, 6WN, 8KZ, 2ADL, 2CQJ, 1729, 4781, 5246, 6447, 6527, 8971, 9094, 9422, 9689 and 9870.

Harrow.—Mr. Mace, 6527, has accepted the office of A.T.R., until such time as G5SR is again free enough to resume his activities as T.R. The first meeting was attended by 2UA, 58R, 6WN, 5246, 5436, 6447, 6527, 8503, 9194, 9244, 9251, 9305, 9458, 9705 and 9800. Mr. Mace gave a demonstration of his proposed oscillograph and an exhibition of some modern components. At the second meeting which was held just after VE day the attendance dropped to seven with G6WN, 6527, 9145, 9251, 9458, 9705 and 9800 in attendance. Our thanks are recorded to Mrs. Mace for supplying refreshments each time. Meetings are now arranged every other Friday evening.

Hayes.—The most successful District meeting of the month, was held at R.A.F. West Drayton when a record attendance of 37 was recorded. Those present listened with interest to a fine talk by G6CJ who addressed in particular those who aspire to a licence. Present were G3BR, 3RH, 3RQ, 3SU, 3XD, 4AQ, 6CJ, 6WN, 6VP, 8IH, 8TH, 2ART, 2CRD, 2DAL, 2FTS, 4062, 4741, 4962, 5172, 5246, 5920, 6447, 8645, 8785, 8818, 9422, 9573, 9574, 9746 and eight new members awaiting BRS numbers. Our thanks to Ft./Sgt. Worthington and others who provided refreshments.

West London.—G2DP, 3ST, 8RN, 3003, 3179, 8996 and 9563

Your Company is requested at the North London and Hertfordshire VICTORY DINNER & DANCE

to be held on

SATURDAY, JUNE 30th, 1945

at the

SALISBURY HOTEL, BARNET

RECEPTION 5.30 p.m. DINNER 6 p.m.

DANCE 7.30 p.m.

A cordial invitation is extended to London and Provincial Members and their Ladies to attend this Convention Curtain-raiser.

Tickets (price 10/- each) are obtainable on application from Mr. S. Howard, G8TY, 92, Arlington Road, London, N. 14 (Enterprise 3219). Early reservation is essential, as accommodation is limited to 100.

journeyed from Croydon to join with 3NQ, 6275 and 6487 in the discussion, opened by 6SKZ on oscillators. 5GH has recently moved into the District after having spent some five years abroad. 6006, a L.A.C. serving with Azores forces writes concerning the Post-War Plan.

Ashford.—G6RS, 2CLL, 5056 and 5169 started a discussion on frequency modulation and transmitters at the last meeting. Meetings will be continued each second Saturday in the month. The A.T.R. will be away from home throughout July.

Pinner.—BR84966 sends a most interesting letter in connection with our Post-War plan.

High Wycombe.—Meetings are again being tried out so if you want them give your support in future. G6WN.

DISTRICT 16 (South Eastern)

D.D.R.—W. A. Scarr, M.A. (G2WS), 8 Beckenham Grove, Shortlands, Bromley, Kent. Scribe: E. H. Trowell (2HKU), 27 Unity Street, Sheerness, Isle of Sheppey, Kent.

Despite Victory in Europe, notes are scarce this month and it is hoped that members will make a real effort to forward news of their activities.

G4FB preparing for the "Day," has built an aerial coupling unit. He sends 73 to 3ZJ, 4AU, SSC. BR89210 whilst servicing British and U.S. equipment in Germany has built a 5 valve superhet. 9210 would like to hear from members in Folkestone. 5XB (Reading) has visited 4HG (Maldstone).

Maldstone.—2DBA has been on leave. 4HG would like to contact members with a view to re-starting the local club.

Sheppey.—2VA is still getting "wound up" with his wind driven charging plant, he has had a visit from 6QC. 8GR has returned from M.E.F. 2HKU visited 2DP (Croydon) at Whitson and attended the Guildford meeting with him and 2VB, 3003.

Gillingham.—The first war-time meeting of the M.A.T.S. was held on April 29 when 2CM, VA, VB, 3PC, 4HG, 6NU, QC, 2AFT, BTI, FTD, HKU and over 20 others attended. Officials were elected as follows:—President, G6NU, Vice President, 6QC, Treasurer, 2AFT, Hon. Secretary, S. J. Coombes, Committee, 2CM, 2HAU. G2VB and Mrs. Gilmour of Croydon were welcome visitors. Members in this area are urged to contact 6NU, 42 Richmond Road, for further details. 2CM is building a class A amplifier for modulation and gramophone work. The 50-150 Mc/s. receiver built by 6NU is working well. 2HKU.

DISTRICT 17 (Mid East)

D.R.—A. C. Simons (G5BD), Admiralty Road, Mablethorpe, Lincs. Phone 69.

An old friend returns to the fold in Len Hodge, G6LH—a new QRA with A.C. mains has no doubt stimulated the latent "ham" interest. Welcome O.M. and good hunting. Len gives news of G6GH who he says is in great spirit and anxious for "T. & R." day! G8BQ and 2BQC are still together in B.L.A. (No. not now). 2BQC has been on leave prior to departing for DX—G6CL. G2UK is now back in London. G2VY making preparations for the great day, found his shack floor with quite a low angle radiation; this has been remedied and some power plugs fitted. G4GX having finished his pre-selector and found a few snags, is now engaged in constructing a field strength meter. Gainsboro had a pleasant surprise on May 7 when ex G6UO (now ZS6BT) arrived in person, having flown from the Cape on duty. G3OS, G3WB, 4315 and 5986 gathered to meet him and souvenir discs were cut by all present, for the visitor to take back to Africa. G3OS bemoans the departure of his Service friends but reports a new member in G4OF. G8SH is very active on a course, but hopes to resume his recreation at G5BD's shortly.

With the end of hostilities in Europe, shack spring cleaning will be general in anticipation of an early re-issue of licences. The DR in wishing a speedy return to those in the Services makes one request to everyone—please do not go on the air until every part of the station is in tip top order. Less haywire this time chaps. G5BD.

DISTRICT 18 (East Yorkshire)

District Scribe: S. Davidson (G6SO), 10 Sidney Street, Scarborough.

Hull.—BR89443 reports by letter from Ross-shire. SUL building an A.C./D.C. P.P. amplifier. 2BIP still experimenting with his new superhet. 3PL constructing a C.C. frequency standard. VE3RW has left for Newcastle and Nottingham. The next meeting is fixed for June 25, 7.30 p.m., at the Imperial Hotel. G3PL.

Scarborough.—G6SO was pleased to welcome back Percy Briscoombe, G8KU (R.N.V.W.R.), after some considerable time as a P.O.W. in Germany. He has had a very trying ordeal and will take some time to recover fully. Since his arrival he has met most of the "Locals" including 5GI who has been over on a short visit from Newcastle. G6SO.

DISTRICT 19 (Northern)

D.R.—R. J. Bradley (G2FO), 36 Raby Road, Stockton-on-Tees.

Catterick.—G8PP and G8SMQ have not been seen recently and it is rumoured that they have left for India. 3PY has gone to South Wales. 8AF has returned from leave. 2BIL and 2BUJ have made themselves known. The weekly meetings continue

to be well supported and at one of them a lecture by 2BIL on quality audio equipment was appreciated by all present. The Catterick members who visited the Leeds P.D.M. would like to thank District 2 members for the very cordial welcome they received.

The D.R. would again like to remind members of the Hamfest to be held in the lecture room, North Riding Infirmary, Middlesbrough on June 23 at 3 p.m. inclusive charge 3s. 6d. Mr. G. A. Kenyon, G3YK, 32 Emerson Ave., Middlesbrough (Tel. 8557), is in charge of the arrangements. High tea will be served at 4 p.m. Members and interested non-members are invited to support this meeting. G2FO.

Scotland

Scottish Records Officer: J. Hunter (GM6ZV), 51 Camphill Avenue, Glasgow, S.1. Langside 237.

Now that VE day has come and gone it is hoped to welcome home at an early date some, at least, of the members who have been away for nearly six years. We now look forward to the time, may it not be too far distant, when we can resume some of our pre-war activities. GM6ZV.

* * *

"A" District.

District Officer: D. R. Macadie (GM6MD), 154 Kingsacre Road, Glasgow, S.4. Scribe: J. D. Gillies (2FZT), 3 Berridale Ave., Glasgow, S.4. Merrylee 4060.

The April meeting was attended by 20 members and two visitors, who found the talk by Mr. A. J. Janes on Transformer Construction extremely interesting. The short-cut methods of easily understood simplified calculations for core and wire areas, etc., which Mr. Janes demonstrated should prove of practical assistance to all present. "Alf," as he is known locally, is Lecture Convener as well as Deputy D.O. and any offers of lectures, demonstrations, etc., should be forwarded to him at 9 Woodbank Crescent, Clarkston, Glasgow.

The May meeting held in the Institute of Engineers and Shipbuilders, 39 Elmbank Crescent, Glasgow, was attended by 17 members. Ft./Sgt. "Snowy" Campbell, VK3MR, who was present, has been North of the Border for a few days to visit the haunts of his ancestors. His visit brought pleasure to all who met him, specially those who contacted VK3MR over the air in pre-war days. (District members send best 73 to you "Snowy" and wish you a safe and speedy return to your own homeland.—D.O.) During the meeting a talk was given by Mr. Scott-Hay (GM2FV), in his usual homely manner entitled the "Beginner in Radio." His remarks ranged over a variety of subjects, and he had to answer many questions from new members as well as from experienced old-timers. 2FZT.

"C" District.

D.O.: J. Gouck (GM3NH), 4 School Drive, Downfield, Dundee.

At the May meeting 11 members assembled to hear a talk on Automatic Frequency Control by Mr. R. P. Conway. Considerable interest was aroused—sufficient to warrant a further talk on frequency modulation and the Miller effect at an early date. It is to be hoped that the successful termination of Part I of the war will regenerate some of the pre-war enthusiasm insofar as meetings are concerned, so here's to bigger attendances from now on! GM3NH.

Northern Ireland

D.R.: J. N. Smith (G15QX), 19 Hawthornden Drive, Belmont, Belfast, N.1. Phone 63323.

There was very little amateur activity in the District during May, but, with the European War well and truly won, we hope to see a great revival of interest during the next few months. G2CN during a visit to his homeland, called upon G16YW. Cecil Cleland was well known to old timers as G12CN. We are glad to know that he is fit and well. In response to a recent inquiry G5ZN writes to say he has arrived home after three years in Bengal. G13VQ is enjoying a rest after being at sea continuously for about 15 months. Sympathy is expressed to Mr. J. Johnston, BR87939 and Mrs. Johnston, on the death of a daughter. G16YW tells us that he still holds QSL cards for G12CC, 3FO, 3ZX, 3SG, 3JP, 5UR, 5HU, 5JN, 6XS, 8WD, 8DB, 8MI, 8GK, and a special one for 5AJ, this being from UPOI, the Soviet North Pole expedition. Please send a stamped envelope to Mr. T. P. Allen, G16YW, 62 Balmoral Ave., Belfast, if you wish to claim your cards. G15QX.

Hospitality Offered

Mr. D. M. Hanwell, BR83804, Seymour Cottage, Winkfield Road, Windsor, Berks, will be pleased to extend hospitality to any Service member or foreign amateur who is in the neighbourhood. A post card in advance will be appreciated.

Record Cards

A considerable number of members still fail to return the record card, duly signed and completed, which is sent to them with their SUBSCRIPTION ACCOUNT. It is essential for record purposes that every member shall complete and return the card without delay. In the case of members serving abroad parents and relatives are asked to forward the card to the member concerned.

As stated in the February issue the request for age only applies to Junior Associates.

HEADQUARTERS CALLING

COUNCIL 1945

President:

ERNEST LETT GARDINER, B.Sc., G6GR.

Executive Vice-President : S. K. Lewer, B.Sc., G6LJ.

Honorary Secretary : H. A. M. Clark, B.Sc., G6OT.

Honorary Treasurers : A. J. H. Watson, F.S.A.A., G2YD.

Honorary Editor : Arthur O. Milne, G2MI.

Immediate Past President : A. D. Gay, G6NF.

* * *

Members : F. Charman, G6CJ, D. N. Corfield, D.L.C.(Hons.), G5CD, Lt. Col. K. Morton Evans, GWSKJ, F. Hoare, G2DP, E. H. Laister, BR5386, S. E. Langley, G3ST, W. E. Russell, G5WP.

G.P.O. Liaison Officer : A. E. Watts, G6UN.

General Secretary : John Clarricoats, G6CL.

April Council Meeting

Resume of the Minutes of a Meeting of the Council of the Inc. Radio Society of Great Britain, held at New Ruskin House, Little Russell Street, London, W.C.1, at 6 p.m., on Monday April 16, 1945.

Present:—Messrs. S. K. Lewer (Vice-President in the Chair), H. A. M. Clark, A. J. H. Watson, A. O. Milne, A. D. Gay, A. E. Watts, D. N. Corfield, F. Charman, K. Morton Evans, F. G. Hoare, E. H. Laister, S. E. Langley, W. E. Russell and J. Clarricoats (Gen. Secretary).

An apology for absence was received from the President.

(1) It was unanimously resolved to elect 193 Corporate members (37 supported by references and 156 proposed by Corporate members), 17 Associates and 8 Junior Associates. Three Associates were transferred to Corporate membership.

(2) The Brenton Radio Club (Leeds) and the Luton Amateur Radio Club were granted affiliation.

(3) The Monthly Statement of Account and Balance Sheet were presented, adopted and signed.

(4) It was agreed to defer for the time being a decision to reprint the Handbook and Supplement. The Technical Publications Advisory Committee were requested to consider the future technical publications programme.

(5) It was reported that the B.B.C. had issued a statement to the effect that as certain B.B.C. transmission frequencies are now controlled within plus or minus 1 part per million, such transmissions can be used as reference standards of frequency.

(6) Mr. Cundy, G2MQ, wrote to inquire whether the Society could take steps to ensure that the present B.B.C. Droitwich frequency of 200 kc/s is maintained, in view of its convenience as a means of adjusting 100 kc/s bars. Mr. Cundy pointed out that under the Montreux plan (due to become operative in 1940 but held over as a result of the war), Droitwich was scheduled to change frequency to 198.5 kc/s. It was agreed to make inquiries.

Mr. Cundy also inquired whether the Society would ask for frequencies and call signs to be announced at frequent intervals in their General Overseas Service. It was agreed to approach the B.B.C.

(7) Mr. Wilkins, G6WN, wrote to inquire whether it would be possible to send out Ballot Forms for the 1946 Council Elections earlier than usual, in order to enable members serving abroad to register their votes. It was agreed to inform Mr. Wilkins that the Articles of Association govern the closing date (not later than October 31) for the receipt of nominations additional to those made by the Council. Ballot Forms cannot be prepared and distributed until after the closing day for nominations.

(8) Mr. E. Wilson, 2FDR (Hon. Secretary, Midland Amateur Radio Society, Birmingham), wrote to inquire whether it would be possible for members of a local Society to become members of R.S.G.B. on payment of an extra premium. It was agreed to inform Mr. Wilson that the Society's Articles of Association do not permit such an arrangement. Every applicant for election to the R.S.G.B. must pay the statutory fees and sign a Declaration agreeing to accept the Rules, Regulations and Articles of Association.

(9) The President of R.E.F. (France) wrote thanking the Council for sending copies of R.S.G.B. publications. Until such time as currency regulations permit French amateurs to pay subscriptions to the R.S.G.B. it was agreed to send gratis a small number of copies of each issue of THE BULLETIN to R.E.F. for distribution. It was also agreed to send a further supply of Handbooks and Supplements free of charge.

(10) Mr. Watts reported on recent activities of the G.P.O. Liaison Committee and announced that a statement dealing with Radio Service trades had been prepared for publication.

(11) The Secretary tabled a number of letters from members relating to the statement on post-war licence policy published in

the March issue of THE BULLETIN. He referred briefly to those containing suggestions or criticisms, and stated that it was his intention to circulate the letters to the Liaison Committee for comments.

(12) Mr. Hoare inquired whether pre-war holders of A.A. Licences would be permitted, if they so desired, to retain their 3-letter calls with the addition of the International prefix. It was agreed to bring the suggestion to the notice of the G.P.O. Liaison Committee. Mr. Hoare also inquired whether it would be possible for the Society to conduct Morse tests on behalf of the G.P.O. Council agreed that such an arrangement would not be practicable.

(13) Lt.-Col. Morton Evans expressed the view that the Society should take steps to ensure that, when licences are restored, every licensee is made aware of his responsibilities as an operator. He felt that the Council should embark on a comprehensive propaganda campaign designed to encourage good operating. Council having concurred, it was resolved to set up a Propaganda Committee under the Chairmanship of Lt.-Col. Morton Evans with Messrs. Milne and Russell as members. The Committee were given power to co-opt.

(14) It was agreed to ask the Technical Publications Advisory Committee to consider the suggestion, made at the Annual General Meeting, that the Society should draw up standards of performance for communication type receivers.

The meeting closed at 9.20 p.m.

Operation of G7 Stations Suspended

We have been asked to inform members that certain stations which have in past months been heard employing G7 call signs and apparently working as amateurs have, in fact, been serving a special purpose for which they received official authority. The working of this special service has now been suspended.

No amateur transmitting station in this country has, since the outbreak of war, been licensed to operate as such, although the restoration of amateur licences is under the active consideration of the authorities concerned as will be obvious from the announcement published on the first page of this issue.

R.S.G.B. Prisoners of War Fund

DONATIONS.—The General Secretary acknowledges with thanks, on behalf of Council, receipt of donations from: S. C. Harvey, G4KY, 10s.; M. Campbell, VK3MR, £15; ("A Thank Offering"), Caterick Camp, per BR55724, 10s.; "Mac", 5s.; Liverpool Meeting, per 2FHB, 7s.; G. Carter, G451, 10s.; R. W. Read, 10s.; M. F. J. Samuel, 5s.; F. E. Herzog, 5s.; H. G. Lapworth, 5043, 5s.; Caterick Camp, per BR55724, 10s.; District 15 Meetings, per G6WN, £3 10s.; H. A. Afford, 8147, 5s.; R. S. Jackson, G6JN, 5s.; G. D. Elliott, 5691, 5s.; D. C. Derry, G8PQ, 15s.; E. R. Cook, ex-G6UO, £1 1s.; District 7 Guildford, £1 10s. 2d.; R. B. R. Swimmer, BR5552, 5s.; F. W. How, 5s.; A. C. Webb, G6WQ, £1 1s.; A. G. Hudson, 1s. 6d.; P. H. Smith, 2FWV, £3 12s. 2d.; Caterick Meeting, per BR55724, 11s.; Birmingham P.D.M., £25; N. Druce, BR52600, £2 2s.; J. E. R. Wood, BR5296, £5; District 13, per G3ST, £1 17s. 6d.

Total receipts to date £1,617 0s. 5d. Total expenditure to date £921 0s. 9d.; Balance in hand as at 30th May, 1945: European fund £325 19s. 8d. Far East fund £370.

Situations Vacant

The General Secretary invites Service or ex-Service members seeking employment in the radio industry to communicate with him privately. Brief details of experience, age and salary expected, should be given. No correspondence can be entered into, but all letters will be passed forward for the attention of interested parties.

American Publications

The Society is in a position to accept orders for the following publications which are ordered individually from America:

"QST" (Official monthly publication of The American Radio Relay League). By subscription, per annum	17s. 6d.
"The Radio Amateur's Handbook" (A.R.R.L.) 1945 Edition	10s. 6d.
"The Radio Amateur's Handbook"—Special Defence Edition (A.R.R.L.)	8s. 6d.
"The Antenna Handbook" (A.R.R.L.)	4s. 0d.
"A Course in Radio Fundamentals" (A.R.R.L.)	3s. 6d.
"The Radio Handbook" (Editors and Engineers) 1943 Edition	12s. 0d.
"Radio" (Monthly publication of Radio Magazines Inc.). By subscription, per annum	21s. 0d.

Orders must be accompanied by a remittance made payable to the Society and rates and prices are subject to alteration without previous notice. Delivery can be expected in about 12 weeks from date of order. Service Addresses must not be used. Single copies of text books only may be ordered.

Members who change their address during the currency of a subscription to QST or Radio should advise the publishers direct.

THE KREIGES RETURN THANKS—(continued from page 185)

DEAR SIR,—After a sojourn of four years and three months in Germany, I take this, the first opportunity of expressing my heartfelt thanks to all contributors to the R.S.G.B. P.O.W. Fund. It is almost impossible to express in words how, as a prisoner of war, one looked forward to the receipt of parcels and letters.

Yours sincerely,

ARTHUR C. WEBB (G6WQ).

DEAR SIR,—Thank you for the very kind letters and the kit bag you sent to my mother on my behalf, whilst I was "in the bag," and for the wonderful gifts of cigarettes and books which I received during my captivity.

The cigarette parcels never had a readable date on them but one package of 1,000 Churchmans, received over a year ago, and put by for a rainy day, were a godsend in the last few months, when such things were extremely scarce. If you could have seen the delight with which a cig. was passed round a group of 4 or 5, taking puffs in turn, I am sure that one example would have conveyed sufficient thanks for all the trouble you took in getting them to us.

Very many thanks again to all concerned.

Yours truly,

J. E. R. WOOD (BERS296).

EXCHANGE & MART—ADVERTISEMENT RATES

(See Important Notice in next column)

MEMBERS' private advertisements 2d. per word, minimum 3s. TRADE advertisements 4d. per word, minimum 6s. Box Numbers: 6 words, plus 1s. TERMS: Cash with order. All copy and payments to be sent direct to Advertisement Managers, Parris Advertising Ltd., 121 Kingsway, London, W.C.2, by the 25th of the month for following month's issue.

ALL KINDS OF PRINT, especially QSL Cards.—Send your inquiries to G6MN, Castlemount, Worksop.

ABUNDANT supplies available for amateurs:—0-1mA meters, all sizes from £2. Mullard universal bridges, £15. Oscilloscopes, £70. ex-A.M. Meters 0-1.5, 0-15, 0-150 volts 1-5 MAF.S.D., £4 5s. Rothermel pick-ups, £3 17s. 6d. Speakers 2in. to 12in., from £1 1s. Mains intervalve, O.P. and filament transformers, condensers and resistors of all descriptions, 10,000 English and American tubes in stock. S.W. gear of all types, chassis, metal cabinets, etc. More goods available too numerous to list. All new. State your wants. S.A.E. please.—BR57370, BERNARD'S RADIO COMPANY, 67 High Street, Chatham, Kent. 'Phone: Chatham 2927.

ADVERTISEMENT Manager of R.S.G.B. BULLETIN requires board-residence for wife and self for a few week-ends (Friday evenings to Monday mornings). Location within approx. 40 miles of London.—Full details, terms, to H. FREEMAN, Parris, 121 Kingsway, London, W.C.2.

ALL-WAVE superhet coils. Aerial, oscillator, 2 I.F.'s, incorporated with all trimmers, 30s. Pifco "All-in-one Meter, 30s. Perfect B.T.H. headphones 15s.—Write: EAST, 23 Eversholt Street, London, N.W.1.

AMATEUR offers the following components, all brand new and guaranteed O.K. See other lines offered by BR55689 in May issue. Please send S.A.E. with enquiries. Valves, 1 each of following, 304, 6J5G, 7s. 6d. ea. C1C, 80, 9s. ea. 6A8G, X14, 6K7 metal, 25L6GTG, 6J7G, 6B7, 6C6, 6D6, 10s. ea. 5Z3, 0Z4 metal, 14s. ea. 2 each of following: AC/HL, 7s. 6d. ea. PX4, U14, 2P, 9s. ea. EL5, RV200/600, 14s. ea. PX25, V248A, 15s. ea. Three 6C5G, 6s. 6d. ea. Four EL35, 14s. ea. Five 6L6G, 14s. ea. One VT15, 80s. Electrolytics: Plessey 450v. wkg. aluminium cased. Two 32µF, 10s. ea. Two 8x8µF, 12s. 6d. ea. Four 8µF, 6s. ea. Waxed cardboard types, 500v. wkg. Three 8µF, 5s. ea. One each 4µF, 4s. 2µF, 3s. 16µF, 8s. Six 50µF 50 v. bias type, 3s. ea. I want Hammarlund Super Pro, Jensen bass speaker, "Bug" key, typewriter, or what have you? —BR55689, 24 Rossie Island Road, Montrose, Angus.

BAKER'S 12 in. P.M. Speaker, 15 ohms. Exchange for crystal pick-up, good condition. Other items.—2BCP, 3 Clarence Road, Hastings.

FERRANTI 0-100mA 4 in. diameter 503. Eddystone No. 1033 cabinet 10s. 6L6G, 10s. Split cane 11 ft. trout rod recently reconditioned, and 190 trout and sea-trout flies in leather case; £10.—Write F./O. MARRIS, 28 Archibald Road, Exeter.

FERRANTI 0-1 mA, 30s.; phones Browns' A, £1, Nesper 10s.; 350-0-350 120 mA, 5v, 2.5v, shrouded 8 lb, 21s.; new cased 1 µF 800v wkg., 4s. each; 25v d.c. 3s.; 6C6, 6F6, 57, 58, 5s.; AZ1, 6s. Wanted, camera Ensign Selfix 320 or similar.—Box 609, PARRIS, 121 Kingsway, London, W.C.2.

HUNT'S capacity and resist bridge; will sell or exchange for test equipment.—BR59941, Albion Row, Carharrack, Redruth, Cornwall.

MASSIVE Philips transformer, primary 230v, secondary 2,000-0-2,000v, 200mA and filament windings, £3. 25 yards brand new Coaxial Television aerial feeder, rubber covered, genuine "Telcon," £1. Wanted.—"Thordarson" modulation transformer T15D79, £11M77, also high grade communication receiver.—GXNV, 89 Ferne Road, Cambridge.

MONOMARK service.—Permanent London address. Letters redirected. Confidential. 5s. p.a. Royal patronage. Key tag 9d.—Write BM/MONO7A, W.C.1.

NEW Mallory 6c. 4-pin UX Vibrator, 12s. EF50 valve, 10s. 8 amp heavy duty Morse key, 10s. Few 8 amp Morse sets for mounting, 6s. ea. Crystals various from 2,000 to 4,000 kc/s., 15s. ea. J50 Rectifier, 10s. 140 p.f. air trimmers, 3s. Tank coil 25T, 3 in. x 1 in., Silvered copper tube, concentric slider giving approx. 8 ft. bandspread. Complete with dial travelling light and calibrated 5-1,870 Mc/s., £2. Ditto dual assembly, £3 10s. 1µF 5,000v cons, 5s. ea. 75 ft. Television feeder, 1 in. diam., single core, screened and insulated polythene, 2s. yd.—H. ENGLISH, The Maltings, Rayleigh Road, Hutton, Brentwood, Essex.

NEW Ham supplies.—Oil filled condensers, 10 µF 750 wkg., 17s. 6d.; 4 µF 1,000 wkg., 14s. 6d.; 4 µF 2,000 wkg., 21s. M.C. meters 50mA latest square type 45s. Eddystone and other Ham components available. List 1d.—GORDON J. STRUCK, 72 North Street, Sudbury, Suffolk.

SALE.—Mazda 7 in. cathode ray tube, all coils and complete 1,500 volt power pack; nearest offer £15. Transmitter power pack, output 500 volt 200 mls and 6.3 volts, £6. A.C. Eliminator, 25s. Taylor meter, model 90; offers. Wanted, Mazda T31 and A.C. Gramo motor.—Box 596, PARRIS, 121 Kingsway, London, W.C.2.

IMPORTANT NOTICE

As and from the JULY issue MEMBERS' private advertisements in the Exchange and Mart section must not exceed 100 words, and TRADE advertisements 50 words.

SALE.—Wharfedale 10 in. Golden speaker, universal O.P. transformer, list £4 5s., accept £3. Ferranti 3-range meter 0-7½, 0-15, 0-30mA, £2 10s.—WHARMBY, 38 Wickentree Lane, Failsforth.

SALE.—Eddystone Kilodyne 4, 12 to 550 metres complete with valves and coils.—Offers, 2HKU, 27 Unity Street, Sheerness.

SALE.—Old 2-valve mains set, no cabinet, one valve missing; 20s. Eddystone "All World Two," less cabinet, only 40 metre coil; 40s. Both plus carriage. Lissen H.T. Eliminator, 15s. Godwinex eliminator 250 volts output, 25s. American valves most types. Acorns 954, 955, 956, 30s. Holders ceramic 1s. 3d., 9002, 9003, 25s. Holders 1s. 8 µF 600v wkg. electrolytics, 8s. 6d. Also several other useful items. Stamp for list.—Box 603, PARRIS, 121 Kingsway, London, W.C.2.

SALE.—Eddystone "E.C.K." communication receiver, speaker and manual as new, £45, pre-war list. First reasonable offer accepted; London buyer preferred.—G6QN, 1 Boundary Road, Colliers Wood, S.W.19.

TELE-RADIO (1943) LTD. for brand new good quality components at manufacturers list prices. Suppliers to professional constructors and amateurs who want only the best. Weston meters 240 micro amps centre zero reading £3 5s. 0-1 mA, £2 10s. 0-500 micro amps, £3 0-100 micro amps, £3 15s. 0-50 micro amps, £4 10s. 1 mA instrument rectifiers, 12s. 6d. "Spot-on," wire wound precision resistors plus or minus .05 per cent., 5s. 6d. each (up to 50,000 ohms only). Single pole 12 position switches 3s. 6d. each; 4 pole 3 way, 3s. 6d. each. Cathode Ray Tubes G.E.C. 1½ in., £2 15s. Cossor 23D, 2½ in., £3 6s. Cossor 26D, 4½ in., £6 10s. Cossor GDT4B gas filled triode, 24s. 4d. High voltage rectifiers and condensers. Potentiometers carbon, 4s. 6d.; with switch, 6s. 6d.; wire wound, 6s. 6d., all usual values. Crystals 100 Kc/s., 45s. (P.O. Permit). Rothermel crystal pick-ups, £3 13s. 6d. and £3 18s. 9d. (high fidelity Red Label, 10s. extra). Celestion and Vitavox speakers. .0005 2-gang condensers, ceramic insulation with s.m. drive, 16s. 6d. Comprehensive stocks of British and American valves. Steel racks, chassis, panels and cabinets, any specification (callers only). Postal inquiries acknowledged same day. Cash orders, if in stock, 24 hours service. Postage and packing extra on all goods.—TELE-RADIO (1943) LTD., 177A Edgware Road, London, W.2. 'Phone: Pad 6116.

WANTED.—Acorns 954 and holders. VR 150/30. 6C8G.—Prices to RICHARDS, 3 College Street, Burnham-on-Sea.

WANTED.—A copy of *Wireless for the man in the street*; edited by "Ralph Stranger."—P.O. Tel. H. PEARCE, 14 Mess, H.M.S. Saumarez, c/o G.P.O., London.

WANTED.—H.R.O. PW-0 Dial with or without condensers. Your price paid.—G2WZ, 13 Tretawn Gardens, London, N.W.7. 'Phone Mill Hill 4400.

WANTED.—H.R.O. Senior complete with 7 coils and power pack. Thordarson TS459. 25,000 ohm 20 to 40 watt resistor. Screened mike plug. Two 866 Juniors. Eddystone Choke type 982. Two 0.50 tubulars. G5N1 Oscilloscope.—G6KL, 9 The Wharfage, Ironbridge, Shropshire.

WANTED.—Used A.C. Communication receiver.—Full details to M. WILLS, BR59281, Southampton Road, Ringwood, Hants.

WANTED.—Radio Frequency Electrical Measurements by Brown. Vacuum Tube Voltmeters by Rider.—TUNNEY, 37 Meadow Road, Beeston, Notts.

50L6 Valve urgently wanted, also Universal Avomoln, Call Book and Jones Radio Handbook. Please state price.—BR54573, 9 Holybrook Road, Reading.

PATENTS AND TRADE MARKS

KING'S Patent Agency Ltd. (B. T. King, G5TA, Mem. R.S.G.B., Reg. Pat. Agent), 146a Queen Victoria Street, London, E.C.4. Handbook and Advice on Patents and Trade Marks free. 'Phone: City 6161. 50 years' refs.

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